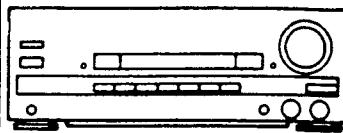


# Service Manual


 ORDER NO.  
**ARP1915**

STEREO AMPLIFIER

# A-Z560

MODEL A-Z560 HAS FOLLOWING VERSIONS:

Type	Power requirement	Export destination
HB	AC220V, 240V (switchable) *	United Kingdom
HE	AC220V, 240V (switchable) *	European continent
HEWZ	AC220V, 240V (switchable) *	West Germany

\* Change the priary wiring.

- This manual is applicable to the A-Z560/HB and HE types.
- As to the HE type, refer to page 57.
- As to the other types, refer to applicable service manuals.
- SP-Z560 must be connected to A-Z560. (SP-Z560 cannot be connected to A-Z460 or A-Z360. Connecting SP-Z560 to A-Z460 or A-Z360 may cause a malfunction).
- A-Z560 cannot be connected to GR-Z460. Connecting GR-Z460 to A-Z560 may cause a malfunction.
- As to the systemcomposition, refer to the S-999D servicemanual(ARP1929).
- Ce manuel pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajuste escrito en español.

## CONTENTS

1. SPECIFICATIONS .....	2	6. ADJUSTMENTS .....	47
2. EXPLODED VIEWS, PACKING AND PARTS LIST .....	3	6. RÉGLAGE .....	47
3. P.C.B's PARTS LIST .....	7	6. AJUSTE .....	47
4. SCHEMATIC DIAGRAMS AND P.C.BOARD CONNECTION DIAGRAMS .....	13	7. IC INFORMATION .....	48
5. BLOCK DIAGRAM .....	45	8. FOR HE TYPE .....	57
		9. PANEL FACILITIES .....	58

PIONEER ELECTRONIC CORPORATION

PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.

PIONEER ELECTRONICS OF CANADA, INC. 505 Cochrane Drive, Markham, Ontario L3R 8E3 Canada

PIONEER ELECTRONIC [EUROPE] N.V. Keetberglaan 1, 2740 Beveren, Belgium

PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

© PIONEER ELECTRONIC CORPORATION 1990

YV JAN. 1990 Printed in Japan.

## 1. SPECIFICATIONS

**Amplifier Section**

Continuous Power Output (DIN) ..... 80 W + 80 W  
(1 kHz, T.H.D 1%, 8Ω)

Music power (DIN) ..... 120 W + 120 W (1 kHz, T.H.D 1%, 8Ω)

**D/A converter section**

Signal-to-Noise Ratio ..... More than 96 dB (EIAJ)

Dinamic range ..... More than 94 dB (EIAJ)

Frequency range ..... 25 Hz to 20 kHz

Total Harmonic Distortion (1 kHz, 40 W, 8Ω) ...No more than 0.06%\*\*

**Input sensity**

PHONO (MM) ..... 2.5 mV

MIC ..... 0.25 mV

VCR, DAT ..... 150 mV

LD ..... 250 mV

**Output level**

DAT, VCR ..... 150 mV

MUTING ..... - ∞

**Power Supply/Miscellaneous**

Power requirements ..... a.c.240 Volts ~, 50/60 Hz

Power consumption ..... 410 W

AC outlets switched (x 1) ..... 50 W

Dimensions ..... 360 (W) x 315 (D) x 135.5 (H) mm

Weight (without package) ..... 8.8 kg

**Accessories**

Operating instructions ..... 1

Remote control unit ..... 1

Dry cell batteries "AA" (IEC R6/UM-3) ..... 1

\*\* Measured By Audio Spectrum Analyzer.

**Accessories**

EP Adaptor ..... 1

• Specifications and design subject to possible modification without notice due to improvement.

## 2. EXPLODED VIEWS, PACKING AND PARTS LIST

### NOTES:

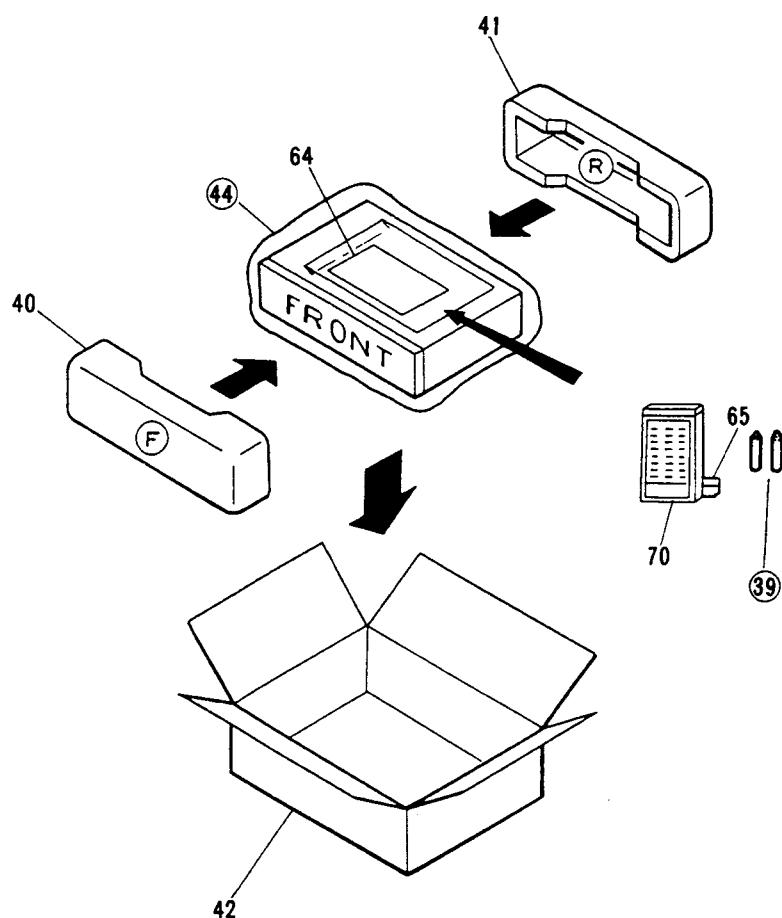
- Parts without part number cannot be supplied.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by “●” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

### PARTS LIST OF EXTERIOR AND PACKING

Mark	No.	Description	Parts No.
	46	MOUNTING PLATE	
	47	FRONT PANEL ASSEMBLY	AMB1640
	48	P.C.B MOLD	
	49	LEG ASSEMBLY(S)	
	50	PLATE	AMR2138
	51	CHASSIS	
	52	REAR PANEL	
	53	BOTTOM PLATE	
	54	BONNET CASE	ANE1208
	55	PLATE	
	56	PLATE	
	57	PLATE	
	58	PLATE	
	59	HEAT SINK	
	60	SUB HEAT SINK	
	61	PLATE (GND)	
	62	SHIELD CASE	
	63	SHIELD COVER	
	64	OPERATING	ARB1221
	65	INSTRUCTIONS(E)	
	66	BATTERY COVER	AZN1991
	67	DSP ASSEMBLY	AWK1231
	68	AF ASSEMBLY	AWZ2737
	69	DISPLAY ASSEMBLY	AWZ2743
	70	DAC ASSEMBLY	AWK1274
		REMORT CONTROL	AXD1130
		UNIT(CU-AX014)	
	71	SCREW	BBZ26P060FMC
	72	SCREW	BBZ26P080FMC
	73	NUT	NK90FUC
$\Delta$	28	AC POWER CORD	RXA1276
	29	SHEET	AEK-512
	30	.....	
	74	LEG ASSEMBLY	
	75	FU1 FUSE (T2.5A)	
	76	FU2 FUSE (T2A)	AEK-511
	77	FU3 FUSE (T1.6A)	AEK-510
$\Delta$	32	NYLON RIVET	AEK-510
	78	FU4 FUSE (T1.6A)	AEK-510
$\Delta$	33	STRAIN RELIEF	ATS1227
	79	T1 POWER TRANSFORMER	AAV1112
	80	LCD DISPLAY ASSEMBLY	
	81	POWER ASSEMBLY	AWZ2611
	82	STANDBY ASSEMBLY	AWZ2735
	83	SP TERMINAL ASSEMBLY	
	84	FUSE ASSEMBLY	
	85	MIC ASSEMBLY	
	41	REAR PAD	
	42	PACKING CASE	
	43	.....	
	44	SHEET	
	45	TERMINAL SCREW	
	AHA1273	POWER VR ASSEMBLY	
	AHD1776	HEAD PHONE ASSEMBLY	
		SUB TRANS ASSEMBLY	
	AHG1016		

A

## PACKING



B

C

D

### 3. P.C.B's PARTS LIST

#### NOTES:

- Parts without part number cannot be supplied.
- Parts marked by “●” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The ▲ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	56 × 10 <sup>1</sup>	561.....	RD1/4PS □ 6 □ J
47kΩ	47 × 10 <sup>3</sup>	473.....	RD1/4PS □ 7 □ J
0.5Ω	0R5.....	RN2H □ □ K	
1Ω	010.....	RS1P □ □ K	

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	562 × 10 <sup>3</sup>	5621.....	RN1/4SR □ 6 □ F
--------	-----------------------	-----------	-----------------

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
DSP ASSEMBLY(AWK1231)				C926		ELECTR.CAPACITOR	CEAS470M25
SEMICONDUCTORS				C927		CERAMIC CAPACITOR	ACG1022
IC901-903		M5218P		C928-930		ELECTR.CAPACITOR	CEAS470M25
IC904		TD6726N		C931		ELECTR.CAPACITOR	CEAS010M50
IC905		PD0051		C932		CERAMIC CAPACITOR	ACG1022
IC906,907		MB81464-12		C933		ELECTR.CAPACITOR	CEAS101M16
IC908		PDG044-A		C934		ELECTR.CAPACITOR	CEAS101M50
Q901	TRANSISTOR	DTA143ES		C935		CERAMIC CAPACITOR	CKDYZF473Z50
D901,902	DIODE	HSS104-02		C936		CERAMIC CAPACITOR	ACG1021
				C937,938		CERAMIC CAPACITOR	CCDCH100D50
COILS				C939,940		CERAMIC CAPACITOR	ACG1022
L901-903	AXIAL INDUCTOR	LAU330K		C941		CERAMIC CAPACITOR	CKDYZF473Z50
L904		LAUR22M		C943,944		ELECTR.CAPACITOR	CEAS101M50
L905,906	AXIAL INDUCTOR	LAU220K		C945		CERAMIC CAPACITOR	CKDYZF473Z50
L999	AXIAL INDUCTOR	LAU330K		C947,948		CERAMIC CAPACITOR	ACG1021
F901,902	FILTER	ATF1071		RESISTORS			
CAPACITORS				R952,953		CARBON FILM RESISTOR	RD1/4PM390J
C901,902	ELECTR. CAPACITOR	CEAS2R2M50		R955		RESISTOR ARRAY(10K)	RA7T103J
C903,904	MYLOR FILM CAPACITOR	CQMA563J50		VR901,902		VRTB6VS102	
C905,906	ELECTR. CAPACITOR	CEAS220M25				Other resistors	RD1/8PM□□□J
C907,908	PL.STYRENE CAPACITOR	CQSA182J50		OTHERS			
C909,910	CERAMIC CAPACITOR	CCCSL151J50		CN6		JUMPER CONNECTOR	KPE15
C911,912	CERAMIC CAPACITOR	CCCSL180L50		CN7		15-P	
C913-916	CERAMIC CAPACITOR	CKCYX473M25				JUMPER CONNECTOR	KPE12
C917,918	ELECTROLYTIC CAPACITOR	CEANP470M16		X901		12-P	
C919	CERAMIC CAPACITOR	CCDCH100D50		X902			ASS1036
C920	CERAMIC CAPACITOR	CCDCH330J50		X903			ASS1035
C921	CERAMIC CAPACITOR	CKDYZF473Z50					ASS1015
C922	CERAMIC CAPACITOR	CCDCH100D50					
C923	CERAMIC CAPACITOR	CKDYZF473Z50					
C924	ELECTR. CAPACITOR	CEAS470M10					
C925	CERAMIC CAPACITOR	ACG1022					

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
POWER ASSEMBLY (AWZ2611)				C156		ELECTROLYTIC CAPACITOR	CEHAQ221M50
SEMICONDUCTOR				C157		ELECTROLYTIC CAPACITOR	CEHAQ220M50
IC401		AUDIO IC	STK4211-5P	C158		ELECTROLYTIC CAPACITOR	CEHAQ470M50
CAPASITORS				C159		ELECTROLYTIC CAPACITOR	CEHAQ221M10
C401,402		MYLOR FILM CAPACITOR	CQMA512J50	RESISTORS			
C403		ELECTR.CAPACITOR	CEAS4R7M50	▲	R151	METAL OXIDE RESISTOR	RS3LMF56J
C404		ELECTROLYTIC CAPACITOR	CEHAQ4R7M50	▲	R153	METAL OXIDE RESISTOR	RS2LMF22J
C405,406		CERAMIC CAPACITOR	CCDSL470J50	▲	R154,155	CARBON FILM RESISTOR	RD1/4PMF470J
C407,408		ELECTROLYTIC CAPACITOR	CEYA101M50	▲	R157	CARBON FILM RESISTOR	RD1/4PMF14R7J
C409,410		CERAMIC CAPACITOR	CKDVB102K50			Other resistor	RD1/8PM□□□J
C411,412		ELECTR.CAPACITOR	CEAS010M50	AF ASSEMBLY (AWZ2737)			
C413,414		ELECTR.CAPACITOR	CEAS220M50	SEMICONDUCTORS			
C415,416		ELECTR.CAPACITOR	CEAS470M50	IC101		REGURATOR IC	UPC78M05I
C417,418		ELECTR.CAPACITOR	CEAS101M25	IC102		REGURATOR IC	NJM78M05I
C423		ELECTR.CAPACITOR	CEAS470M50	IC103		REGULATOR IC	NJM79M05JA
C425,426		CERAMIC CAPACITOR	CCDSL030C50	IC104		REGURATOR IC	UPC78M12I
C427-430		ELECTROLYTIC CAPACITOR	CEYA220M50	IC105			TA7291S
RESISTORS				IC201		OP-AMP IC	M5218P
R405,406		CARBON FILM RESISTOR	RD1/4PM563J	IC202		LOGIC IC	TC4066BP
R411-414		CARBON FILM RESISTOR	RD1/2PM472J	IC203		LOGIC IC	TC4052BP
▲	R417,418	CARBON FILM RESISTOR	RD1/4PMFL222J	IC204		OP-AMP IC	M5218L
	R419	CARBON FILM RESISTOR	RD1/2PM102J	IC205		E-SW IC	LC4966
▲	R420-422	CARBON FILM RESISTOR	RD1/4PMFL□□□J	IC206		LOGIC IC	TC4052BP
		Other resistor	RD1/8PM□□□J	IC207		OP-AMP IC	M5218P
				IC208		OP-AMP IC	M5218L
				IC501		LOGIC IC	TC4052BP
STANDBY ASSEMBLY (AWZ2735)				Q101		TRANSISTOR	2SB560
SEMICONDUCTORS				Q102		TRANSISTOR	2SA970
IC151			NJM78M56FA	Q103-105		TRANSISTOR	2SC2458
Q152		TRANSISTOR	2SB560	Q106		TRANSISTOR	2SD438
Q554		TRANSISTOR	2SD438	Q107,108		TRANSISTOR	DTC124ES
D151-154		DIODE	S5566	Q501		TRANSISTOR	2SA1048
D156		ZENER DIODE	RD33ESB2	Q502		TRANSISTOR	2SC2458
D157		ZENER DIODE	RD6.2ESB	Q503		TRANSISTOR	2SA1048
Q551				Q552		TRANSISTOR	2SA1048
Q553				Q552		TRANSISTOR	2SC2603
C151		ELECTROLYTIC CAPACITOR	CEHAQ222M16	D101		DIODE	2SA1048
C152		ELECTROLYTIC CAPACITOR	CEHAQ471M16	D102-107		DIODE	RBV602
C153		ELECTROLYTIC CAPACITOR	CEHAQ221M50	D108		DIODE	S5566
				D109		DIODE	RB152
							HSS104-02

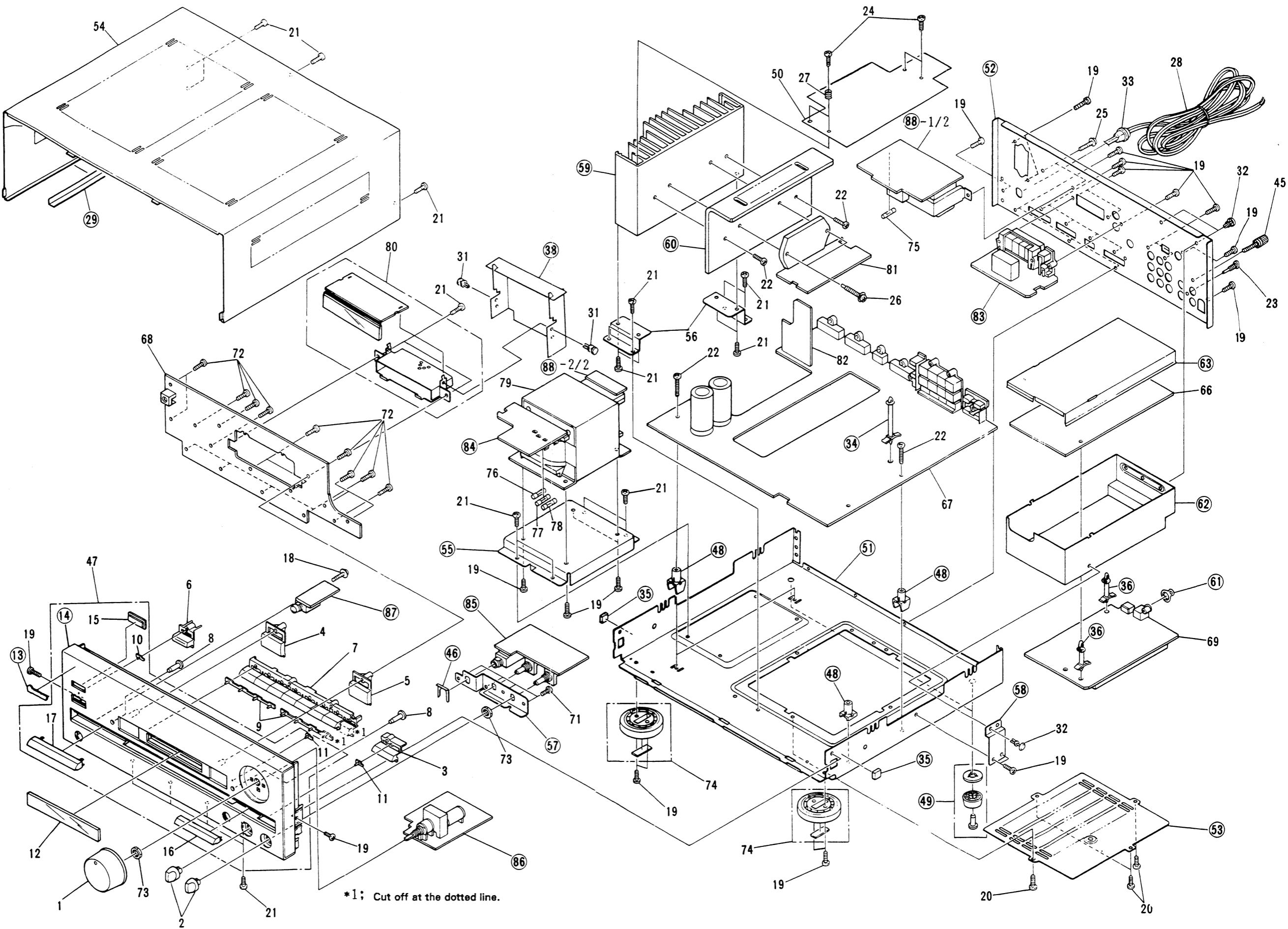
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
SP TERMINAL ASSEMBLY				C611		CERAMIC CAPACITOR	CKCYF103Z50
SEMICONDUCTORS				C612,613		ELECTROLYTIC CAPACITOR	CEJA100M25
D451,452	ZENER DIODE		RD12ESB3	RESISTORS			
RELAY				VR601	VARIABLE (100K - X1)	ACS1026	
RY451	RELAY		ASR-112	VR602	VARIABLE (10K - X1)	ACS1025	
COILS				R614,615	CARBON FILM RESISTOR	RD1/4PM390J	
L451,452	COIL		ATH1004		others resistor		RD1/8PM□□□J
CAPACITORS				OTHERS			
C461-464	MYLOR FILM CAPACITOR		CQMA104J50		JACK		AKN1017
C465	ELECTROLYTIC CAPACITOR		CEANP4R7M100	POWER VR ASSEMBLY			
RESISTORS				SEMICONDUCTOR			
R461-464	CARBON FILM RESISTOR		RD1/4PMFL100J	IC651			M5220P
OTHERS				CAPACITORS			
CN3	JUMPER CONNECTOR 5-P	KPC5		C651,652	ELECTR.CAPACITOR	CEAS100M25	
	PHONO JACK 2-P	AKB1039		C653,654	ELECTR.CAPACITOR	CEAS470M10	
	SPEAKER TERMINAL 4-P	AKE-109		C655	CERAMIC CAPACITOR	CKCYX103M25	
FUSE ASSEMBLY				C656	ELECTR.CAPACITOR	CEAS470M10	
No Parts are supplied with the fuse assembly.				C657,658	CERAMIC CAPACITOR	CCCSL390J50	
MIC ASSEMBLY				RESISTORS			
SEMICONDUCTORS				VR651			ACX1027
IC601				R659-661	CARBON FILM RESISTOR	RD1/4PM390J	
Q601,602	TRANSISTOR		M5218P		Other resistors		RD1/8PM□□□J
D601,602	DIODE		2SC2458	OTHERS			
CAPACITORS			HSS104-02	CN2	JUMPER CONNECTOR 15-P		
C601	ELECTROLYTIC CAPACITOR			HEAD PHONE ASSEMBLY			
C602	CERAMIC CAPACITOR	ACG1019		CAPACITOR			
C603	ELECTROLYTIC CAPACITOR	CEJA3R3M50		C451	CERAMIC CAPACITOR	CKDYX104M25	
C604	CERAMIC CAPACITOR	ACG1017		RESISTORS			
C605	AUDIO FILM CAPACITOR	CFTXA474J50		▲ R453-456	METAL OXIDE RESISTOR	RS2LMF331J	
C606	CERAMIC CAPACITOR	CKCYB681K50		OTHER			
C607	ELECTROLYTIC CAPACITOR	CEJA100M25		JACK			AKN1010
C608	ELECTR CAPACITOR	CEJA010M50					
C609	ELECTR CAPACITOR	CEAS470M10					
C610	ELECTR CAPACITOR	CEJA470M10					

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
D110		ZENER DIODE	RD33ESB2	C245		ELECTR.CAPACITOR	CEASR22M50
D111		ZENER DIODE	RD6.2ESB	C247,248		ELECTROLYTIC	CEYA470M50
D112,113		DIODE	HSS104-02	C502,503		CAPACITOR	
D114		ZENER DIODE	RD3.0ESB1	C504		ELECTR.CAPACITOR	CEAS101M10
D115		DIODE	HSS104-02	C505		ELECTROLYTIC	CEAS102M6
D116		ZENER DIODE	RD4.7ESB	C506		CAPACITOR	
D117		DIODE	HSS104-02	C507509		ELECTROLYTIC	CEAS102M6
D158		ZENER DIODE	RD12ESB3			CAPACITOR	
D501		DIODE	HSS104-02			ELECTR.CAPACITOR	CEAS101M10
<b>COILS</b>				<b>RESISTORS</b>			
L501,502		AXIAL INDUCTOR	LAU101K	▲	R101,102	METAL OXIDE	RS2LMFR22J
<b>CAPACITORS</b>				▲	R103	RESISTOR	RS2LMF222J
C101		CKA (0.01 $\mu$ F/AC250V)	ACG1005	▲	R105,106	METAL OXIDE	
C102,103		CERAMIC CAPACITOR	CKDYF103Z50	▲	R120	RESISTOR	RD1/4PMF470J
C104,105		ELECTROLYTIC	ACH1031	▲	R121,122	CARBON FILM	
		CAPACITOR		▲	R129	RESISTOR	
C106,107		ELECTR. CAPACITOR	CEAS222M16	▲	R130,131	METAL OXIDE	RS2LMF8R2J
C108		ELECTR. CAPACITOR	CEAS471M50	▲	R132-135	RESISTOR	
C109		ELECTR.CAPACITOR	CEAS332M25	▲	R136	METAL OXIDE	RS1LMF8R2J
C110		ELECTR.CAPACITOR	CEHAQ101M50	▲	R217,218	RESISTOR	
C111,112		ELECTR.CAPACITOR	CEAS101M50			CARBON FILM	RD1/2PMFL2R2
C113		ELECTROLYTIC	CEHAQ220M50			RESISTOR	
C114		ELECTROLYTIC	CEHAQ470M50			CARBON FILM	RD1/2PM472J
C115		ELECTR. CAPACITOR	CEHAQ101M50			RESISTOR	
C116		ELECTROLYTIC	CEHAQ221M10			CARBON FILM	RD1/4PM100J
C117		ELECTR. CAPACITOR	CEAS100M25			RESISTOR	
C118		CERAMIC CAPACITOR	CKCYX103M25			CARBON FILM	RD1/4PM390J
C119		ELECTR. CAPACITOR	CEAS221M10			RESISTOR	
C120		ELECTR.CAPACITOR	CEAS010M50			CARBON FILM	RD1/8PM104J
C121		CERAMIC CAPACITOR	ACG1021			RESISTOR	
C160		ELECTR.CAPACITOR	CEAS101M50			Other resistors	RD1/8PM□□□
C201,202		CERAMIC CAPACITOR	ACG1017	<b>OTHERS</b>			
C203,204		ELECTR. CAPACITOR	CEAS2R2M50			PHONO JACK 4-P	AKB-115
C205,206		ELECTR. CAPACITOR	CEAS100M25			PHONO JACK 1-P	AKB1105
C207,208		CERAMIC CAPACITOR	ACG1017			PHONO JACK 9-P	AKB1128
C209,210		CERAMIC CAPACITOR	CKCYB152K50			PLUG 10-P	AKM1037
C211,212		CERAMIC CAPACITOR	CKCYB562K50			JACK (DC)	AKN-203
C213,214		ELECTR.CAPACITOR	CEAS010M50			SOCKET 4-P	AKP1046
C215,216		ELECTR.CAPACITOR	CEAS470M10			SOCKET 14-P	AKP1048
C217,218		ELECTR.CAPACITOR	CEAS4R7M50			SOCKET 15-P	AKP1049
C219,220		ELECTR.CAPACITOR	CEAS100M25			SOCKET 13-P	AKP1052
C221,222		ELECTROLYTIC	CEYA470M50				
		CAPACITOR					
C223,224		ELECTR.CAPACITOR	CEAS100M25				
C233-236		ELECTR.CAPACITOR	CEAS100M25				
C237		CERAMIC CAPACITOR	CKDYX104M25				
C238		CERAMIC CAPACITOR	CKDYF473Z50				
C239,240		ELECTR.CAPACITOR	CEAS2R2M50				
C241-244		ELECTR.CAPACITOR	CEAS100M25				

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
<b>DISPLAY ASSEMBLY (AWZ2743)</b>							
<b>SEMICONDUCTOR</b>							
IC701			PD5118	D191,912		ZENER DIODE	RD6.2ESB3
Q701-704	TRANSISTOR		DTA124ES	<b>RELAY</b>			
Q705	TRANSISTOR		DTA143ES	▲	RY191	RELAY	ASR1024
Q707,708	TRANSISTOR		DTA124ES	<b>TRANSFORMER</b>			
Q709-711	TRANSISTOR		DTC124ES	▲	T191	POWER TRANSFORMER	ATT1115
Q712,713	TRANSISTOR		2SC2458	<b>CAPACITORS</b>			
Q716	TRANSISTOR		DTC124ES	▲	C191,192	CKA(0.01/AC400V)	ACG1003
Q717,718	TRANSISTOR		2SC2458	<b>OTHERS</b>			
D701,702	DIODE		HSS104-02	▲		AC SOCKET 1-P	AKP1035
D703			AEL1100			SOCKET 8-P	AKP1045
D704-706	DIODE		HSS104-02	<b>DAC ASSEMBLY (AWK1274)</b>			
D707,708	LED(RED)		AEL1099	<b>SEMICONDUCTOR</b>			
D710	LED(RED)		AEL1099	IC801			TC74HCU04AP
D712	LED(RED)		AEL1099	IC802		DIGITAL I.F.	PD0037
D714,715	LED(RED)		AEL1099	IC803			PD0036
D717,718	LED(RED,AMBER)		AEL1101	IC804			TC74HC32AP
D719-721	DIODE		HSS104-02	<b>SWITCHS</b>			
D722	LED(RED)		AEL1099	IC805		D/A CONVERTER	LC78820-B
D723,724	DIODE		HSS104-02	IC806			NJM072D-E
D730	DIODE		HSS104-02	IC807			M5218P
<b>SWITCHS</b>				Q801,802		TRANSISTOR	2SA1048
S701-714	SWITCH		ACG1029	Q803		TRANSISTOR	2SC3377
<b>COILS</b>				Q804,805		TRANSISTOR	2SC2458
L701	AXIAL INDUCTOR		LAU101K	Q806,807		TRANSISTOR	2SC2878
<b>CAPACITORS</b>				Q808,809		TRANSISTOR	DTC124ES
C701	CERAMIC CAPACITOR	CKCYX473M25		D801-808		DIODE	HSS104-02
C702	ELECTR.CAPACITOR	CEAS221M10		<b>COILS</b>			
C703,704	CERAMIC CAPACITOR	CKCYX103M25		L801,802		AXIAL INDUCTOR	LAU330K
C705	CERAMIC CAPACITOR	CKCYB102K50		L803,804			ATX1008
C706	ELECTR.CAPACITOR	CEAS010M50		L805-808		AXIAL INDUCTOR	LAU010M
C707	CEA(47000/5.5V)	ACH1070		L809		FERRITE BEAD	ATX1008
C708	ELECTR.CAPACITOR	CEAS4R7M50		L810-813		AXIAL INDUCTOR	LAU010M
C709,710	CERAMIC CAPACITOR	ACG1021		<b>RESISTORS</b>			
C711	CERAMIC CAPACITOR	CKCYX473M25		L817		AXIAL INDUCTOR	LAU010M
<b>RESISTORS</b>				L818		FERRITE BEAD	ATX1008
R742	RESISTOR ARRAY (100K)	RA5T104J		L819,820		AXIAL INDUCTOR	LAU010M
R744	RESISTOR ARRAY (100K)	RA6T104J		<b>OTHERS</b>			
R761	RESISTOR ARRAY (10K)	RA4T104J		Other resistors	RD1/8PM□□□		
<b>OTHERS</b>				<b>CAPACITORS</b>			
X701	CERAMIC RESONATOR	ASS1025		C805		CERAMIC CAPACITOR	CKCYX473M25
	SOCKET 10-P	AKP1044		C806		CERAMIC CAPACITOR	ACG1021
	REMOTE RECEIVER	AXX1010		C807		ELECTR.CAPACITOR	CEAS010M50
	UNIT			C808		CERAMIC CAPACITOR	ACG1021
				C809		ELECTR.CAPACITOR	CEAS101M10

Mark	No.	Description	Parts No.
C810		ELECTR.CAPACITOR	CEAS010M50
C811		AUDIO FILM CAPACITOR	CFTXA224J50
C812		ELECTR.CAPACITOR	CEAS470M10
C813		CERAMIC CAPACITOR	ACG1021
C814		CERAMIC CAPACITOR	CCDCH220J50
C815		ELECTR.CAPACITOR	CEAS101M10
C816		CERAMIC CAPACITOR	ACG1022
C818		ELECTROLYTIC CAPACITOR	CEYA101M16
C819		MICA CAPACITOR	CMA220J500
C820		ELECTR.CAPACITOR	CEAS470M10
C821,822		CERAMIC CAPACITOR	CKCYX473M25
C823		ELECTROLYTIC CAPACITOR	CEYA101M16
C826		ELECTROLYTIC CAPACITOR	CEYA101M16
C827		ELECTROLYTIC CAPACITOR	CEYA221M16
C828,829		ELECTROLYTIC CAPACITOR	CEYA220M50
C830,831		MYLOR FILM CAPACITOR	CQMA683J50
C832,833			CQMXA472J100
C834,835		PL.STYRENE CAPACITOR	CQSA471J50
C836,837		MYLOR FILM CAPACITOR	CQMA471J50
C838,839		ELECTR.CAPACITOR	CEAS220M16
C840,841			CQMXA102J100
C842,843		ERECTOR.CAPACITOR	CEAS470M10
C844,845		CERAMIC CAPACITOR	CKCYB222K50
C847		ERECTOR.CAPACITOR	CEASR47M50
<b>RESISTORS</b>			
R849,850		CARBON FILM RESISTOR	RD1/4PM390J
		Other resistors	RD1/8PM□□□J
<b>OTHERS</b>			
CN1		JUNPER CONNECTOR 11-P	KPE11
CN5		JUNPER CONNECTOR 8-P	KPE8
		DIGITAL JACK 1-P	AKB1073
IC			AKX1015

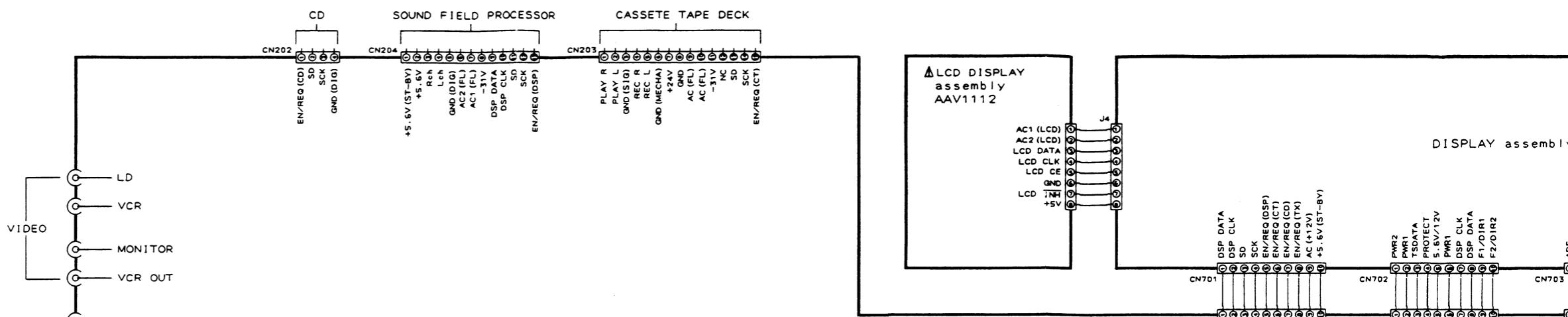
EXTERIOR



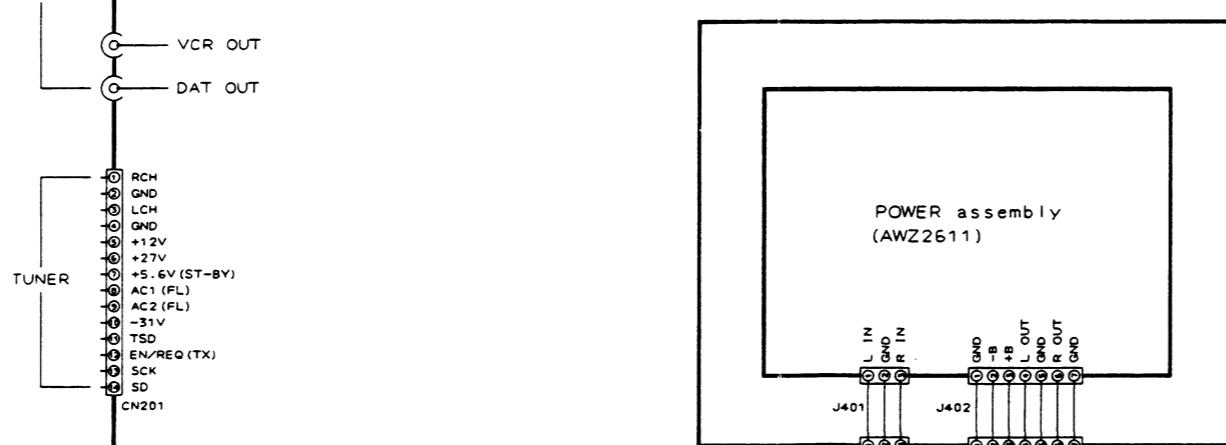
## 4. SCHEMATIC DIAGRAMS AND P.C.B. CONNECTION DIAGRAMS

### 4.1 OVER ALL SCHEMATIC DIAGRAM

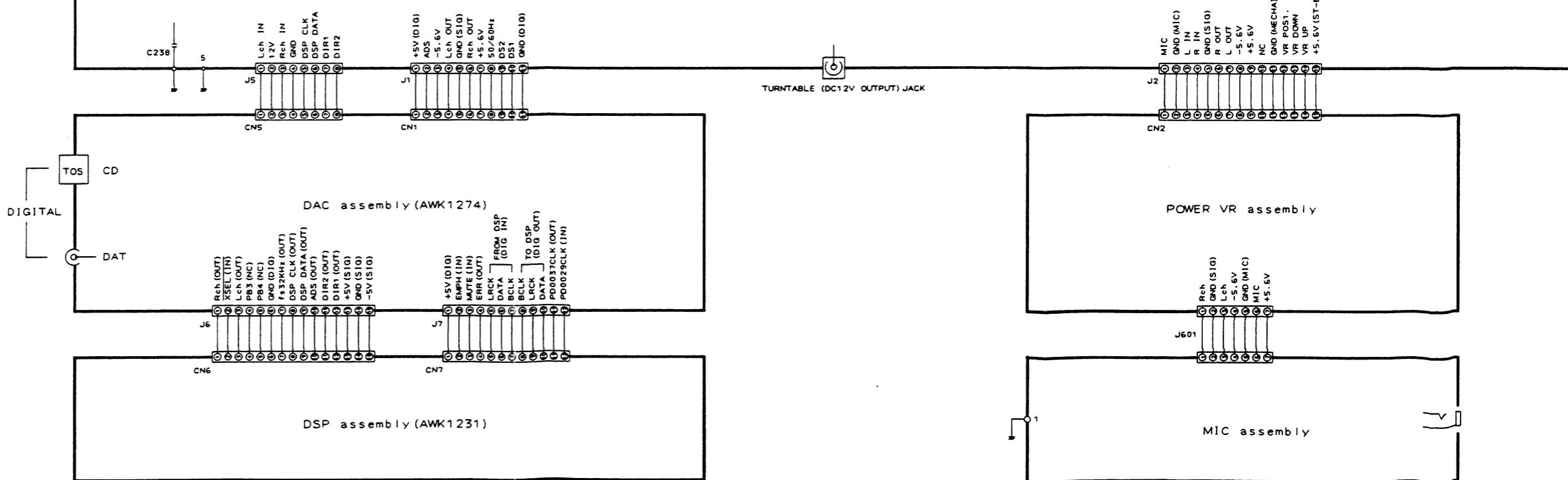
A



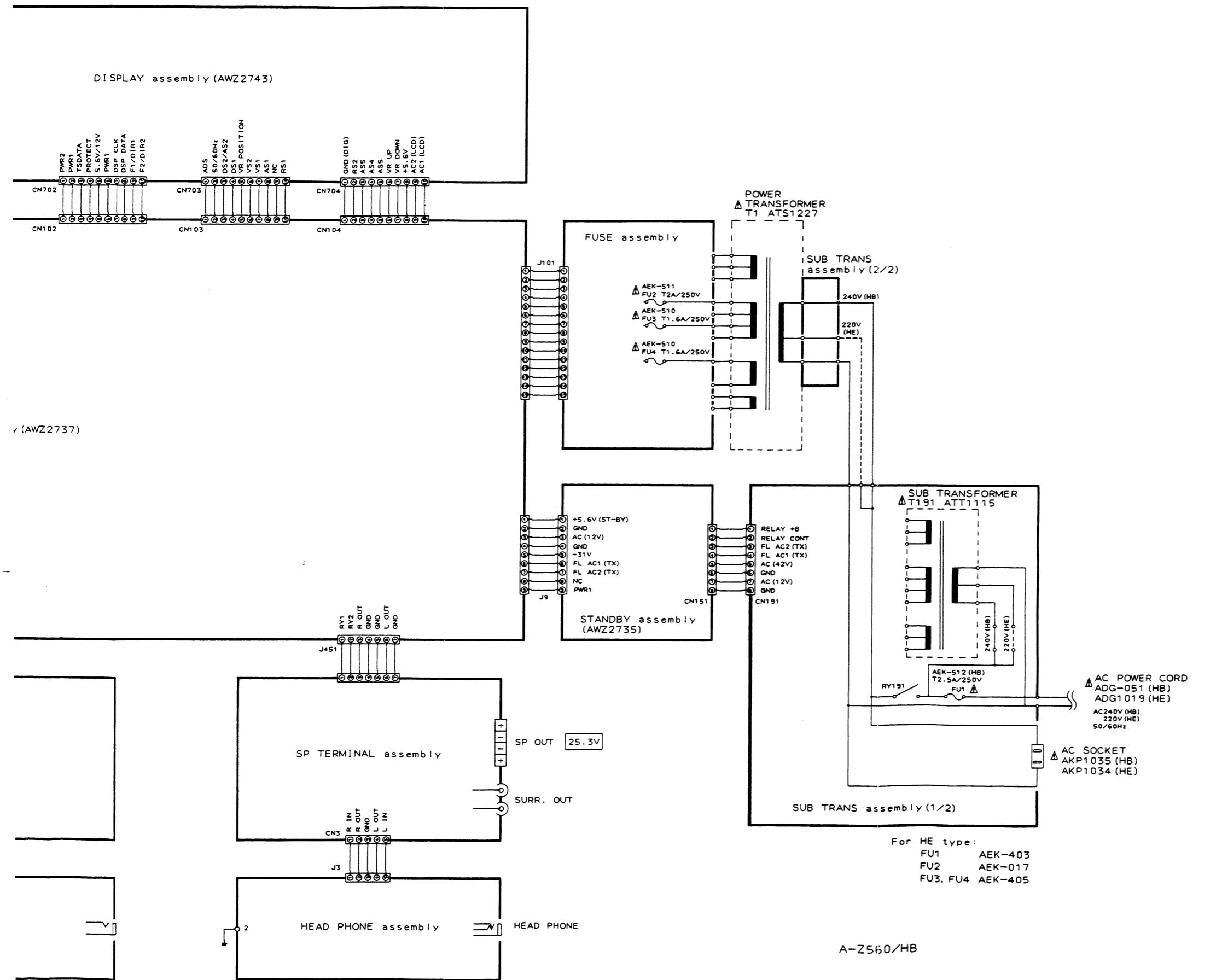
B



C



D



1. RESISTORS  
 Indicated in  $\Omega$ , 1/8W, 1/4W,  $\pm 5\%$  tolerance unless otherwise noted k:  $k\Omega$ , M:  $M\Omega$ , (F):  $\pm 1\%$ , (G):  $\pm 2\%$ , (N):  $\pm 20\%$  tolerance.

2. CAPACITORS  
 Indicated in capacity ( $\mu F$ ) / voltage (V) unless otherwise noted p:pF.  
 Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE CURRENT  
 $\square$ : Signal voltage at 80W + 80W, 8 $\Omega$  output (1kHz).  
 $\square$ : DC voltage (V) at no input signal.  
 Value in ( ) is DC voltage at rated power.  
 $\leftarrow$ : DC current at no input signal.

4. OTHERS  
 $\rightarrow$ : Signal route  
 $\odot$ : Adjusting point.  
 The  $\Delta$  mark found on some components parts indicates the importance of the safety factor of the parts.  
 Therefore, when replacing, be sure to use parts of identical designation.  
 $\times$  marked capacitor and resistor have parts number.  
 This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCHES

DISPLAY assembly

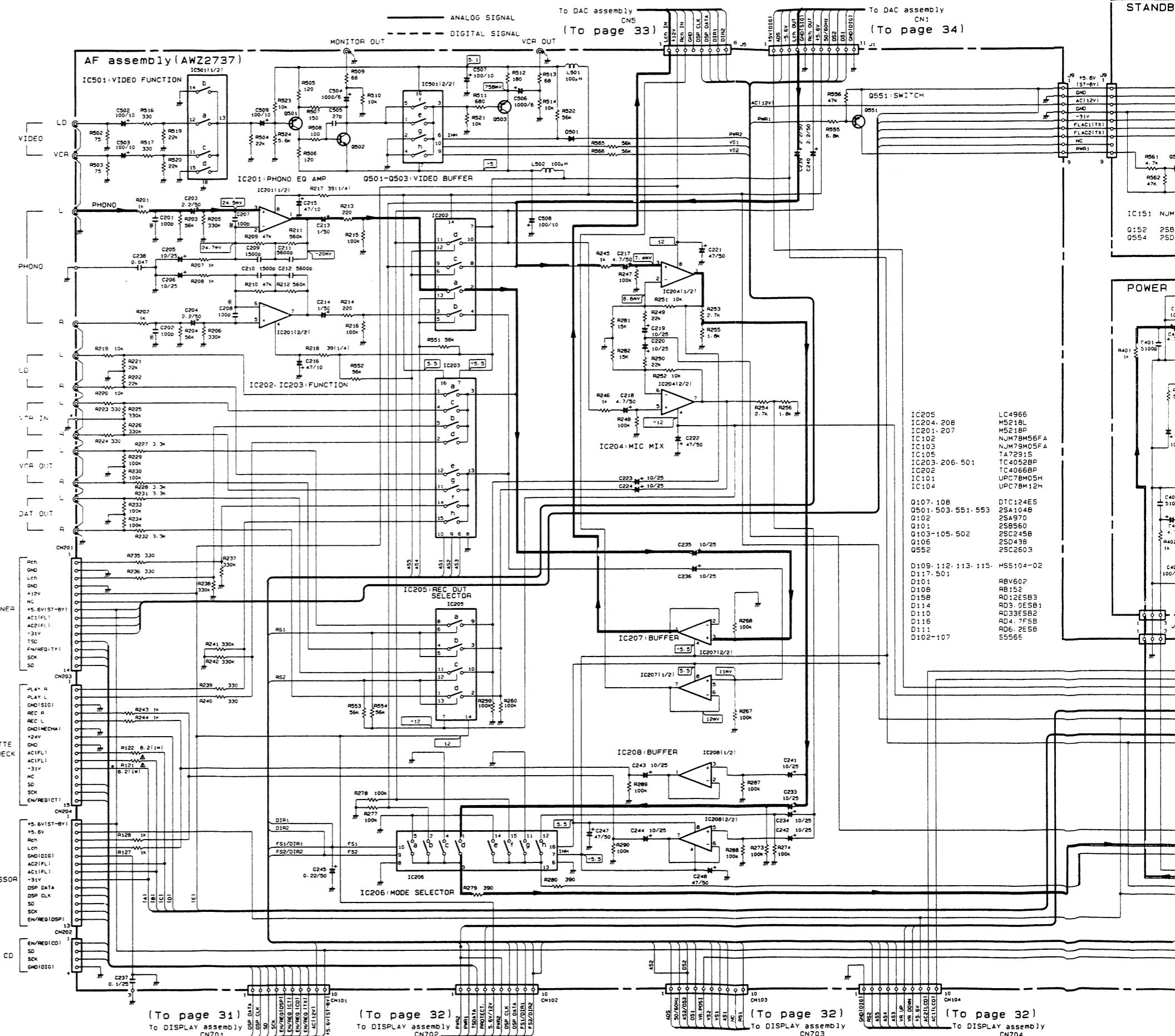
S701	POWER	S708	CD
S702	LSS SET	S709	LD
S703	LSS MODE	S710	VCR
S704	PHONO	S712	DIRECT
S705	TUNER	S713	MUTE
S706	TAPE	S714	SURR.
S707	DAT		

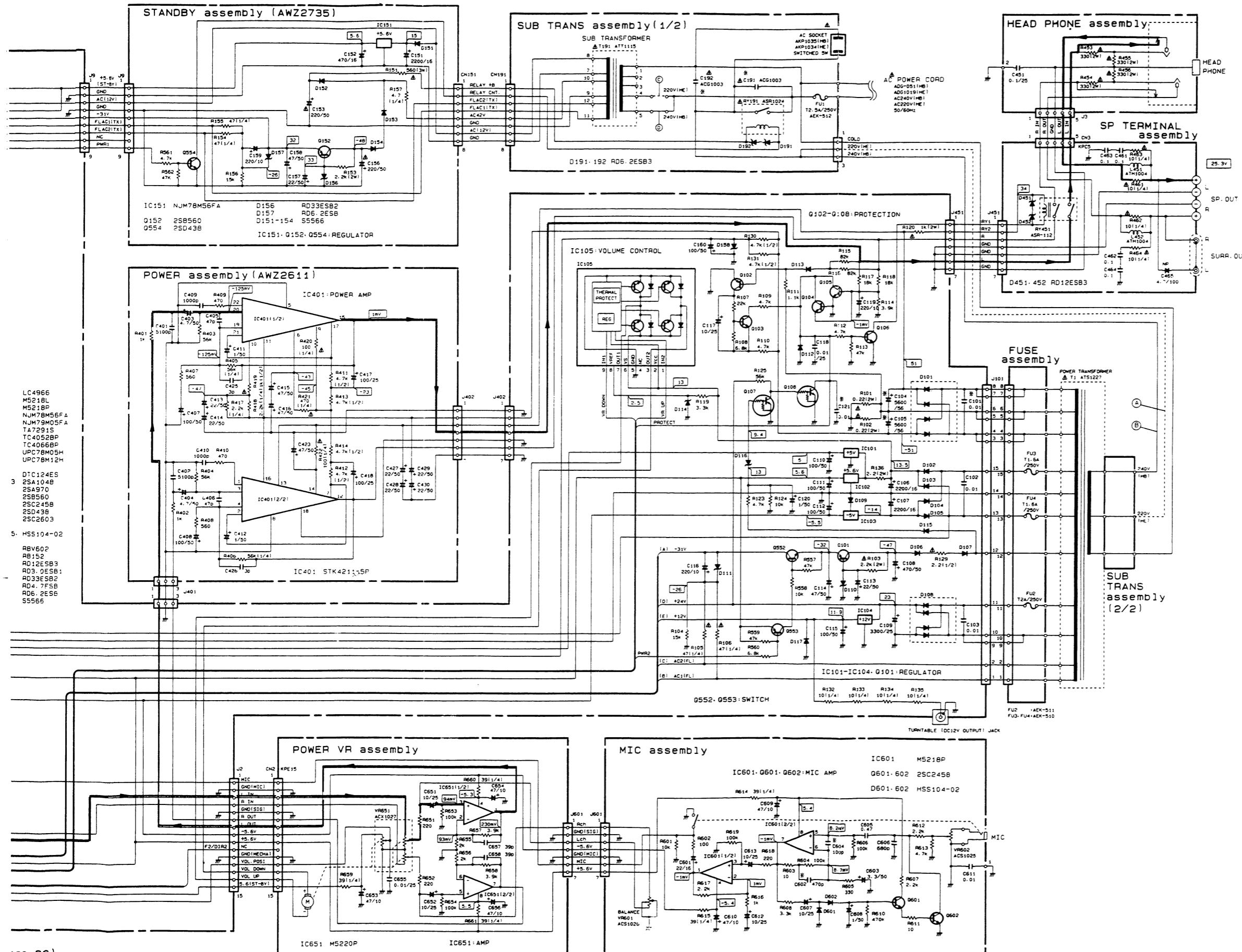
B

C

D

4.2 AF (AWZ2737), STANDBY (AWZ2735), SP TERMINAL, FUSE, POWER (AWZ2611), MIC, POWER VR, SUB TRANS and HEAD PHONE assembly





AF assembly (AWZ2737)

A  
IC201  
IC202  
IC206  
IC205  
IC204  
IC203  
IC207  
VCR OUT  
VCR IN  
LD  
B  
IC101  
IC105  
Q503  
Q103  
Q502  
Q102  
Q106  
Q501  
Q104  
Q105  
TUNER  
MONITOR  
C  
CO  
TAPES  
Q108  
Q107  
D  
Q101  
Q552  
Q551  
Q553  
STANDBY assembly (AWZ2735)

To DAC assembly CN5  
(To page 35)

To DAC assembly CN1  
(To page 35)

POWER VR assembly

To DISPLAY assembly CN704  
(To page 30)

POWER assembly (AWZ2611)

To DISPLAY assembly CN703 (To page 30)

To DISPLAY assembly CN702  
(To page 29)

FUSE assembly

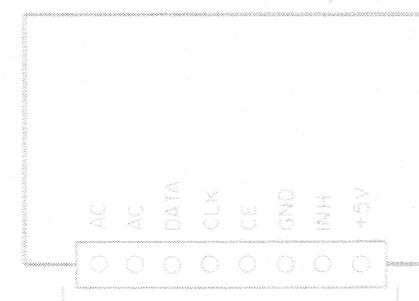
To DISPLAY assembly CN701  
(To page 29)

TI POWER



## 4.3 DISPLAY assembly (AWZ2743)

LCD DISPLAY assembly



## NOTE

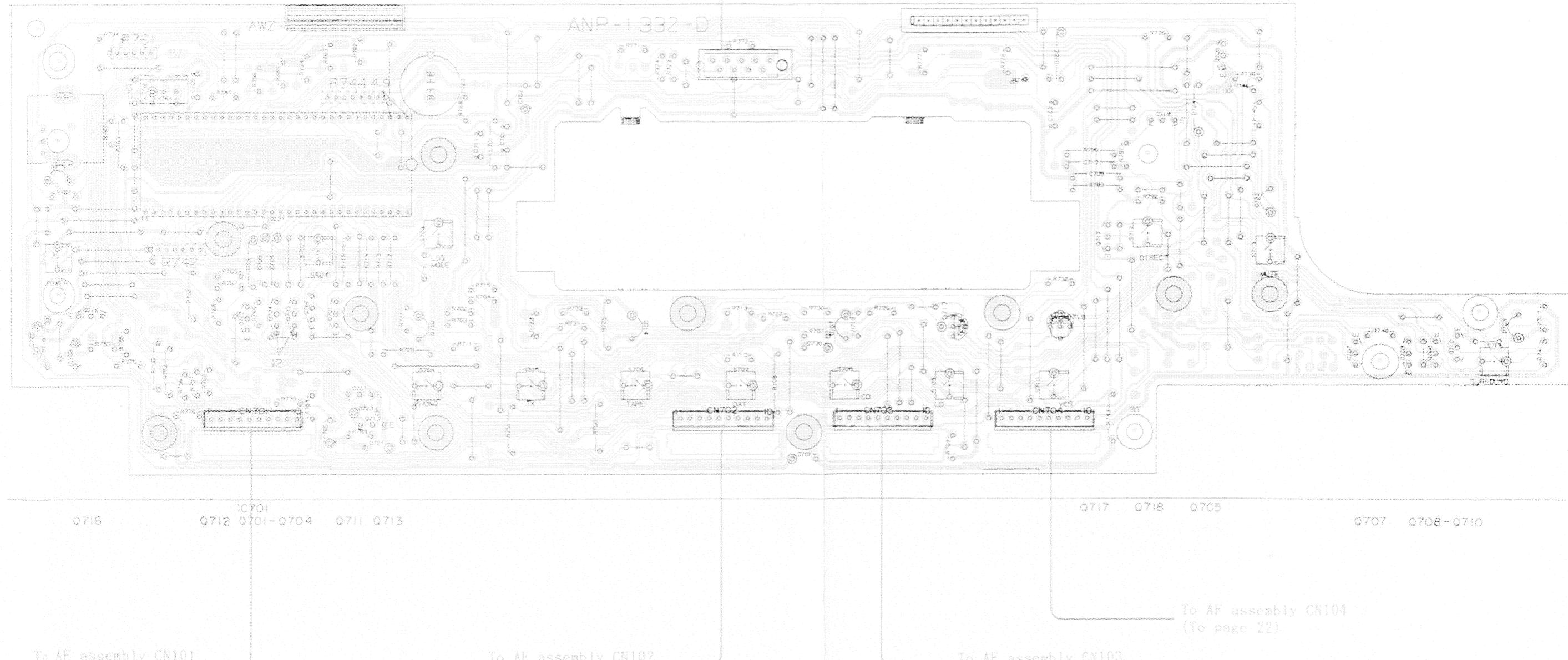
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

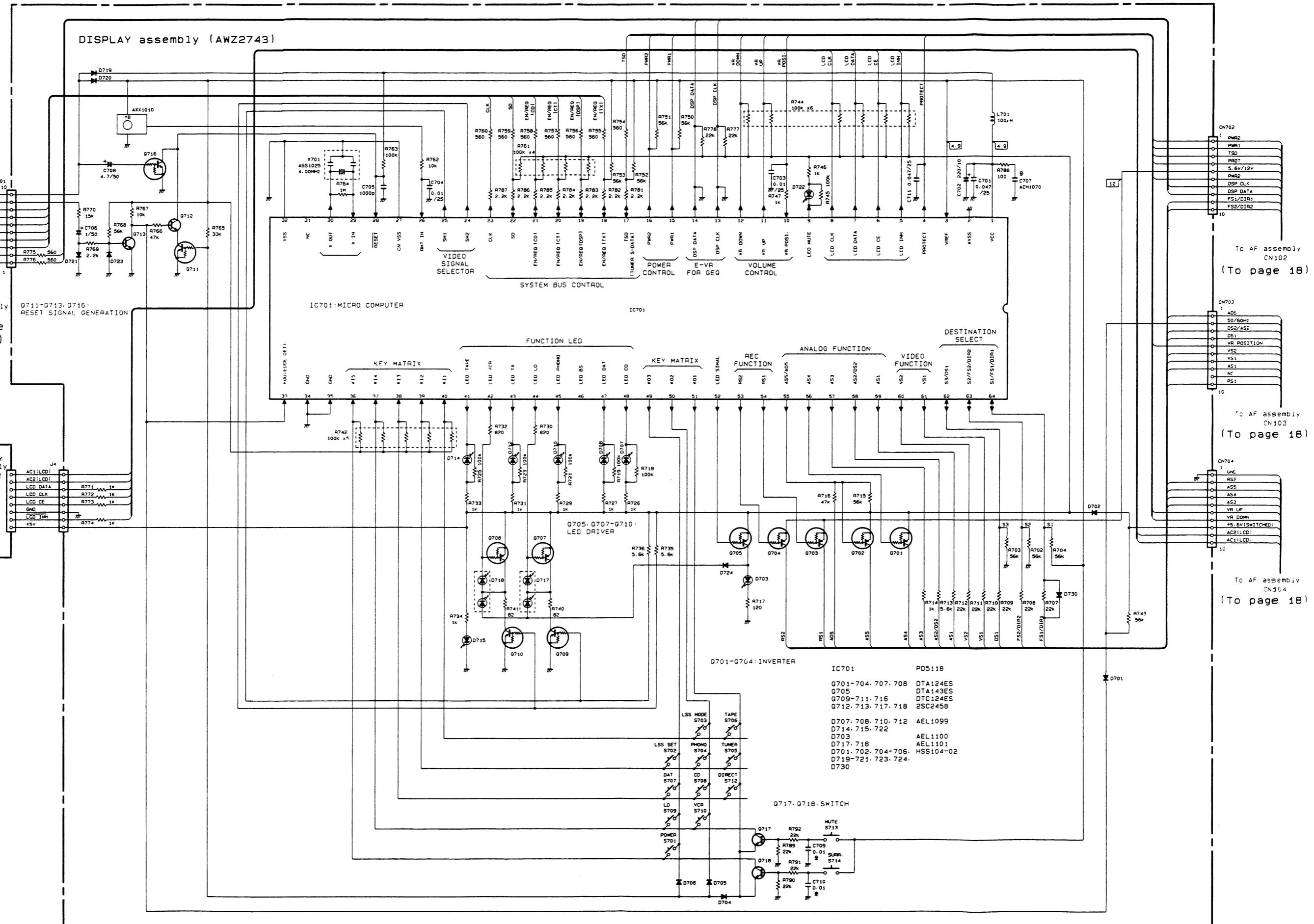
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504	or	Transistor
Q215	or	Radiator type transistor
Q203	or	Diode
R237	R	Resistor
C513	C	Capacitor (Polarity)
C416	C	Capacitor (Non-polarity)

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Cord
F	Filter
VR	Variable resistor or Semi-fixed resistor

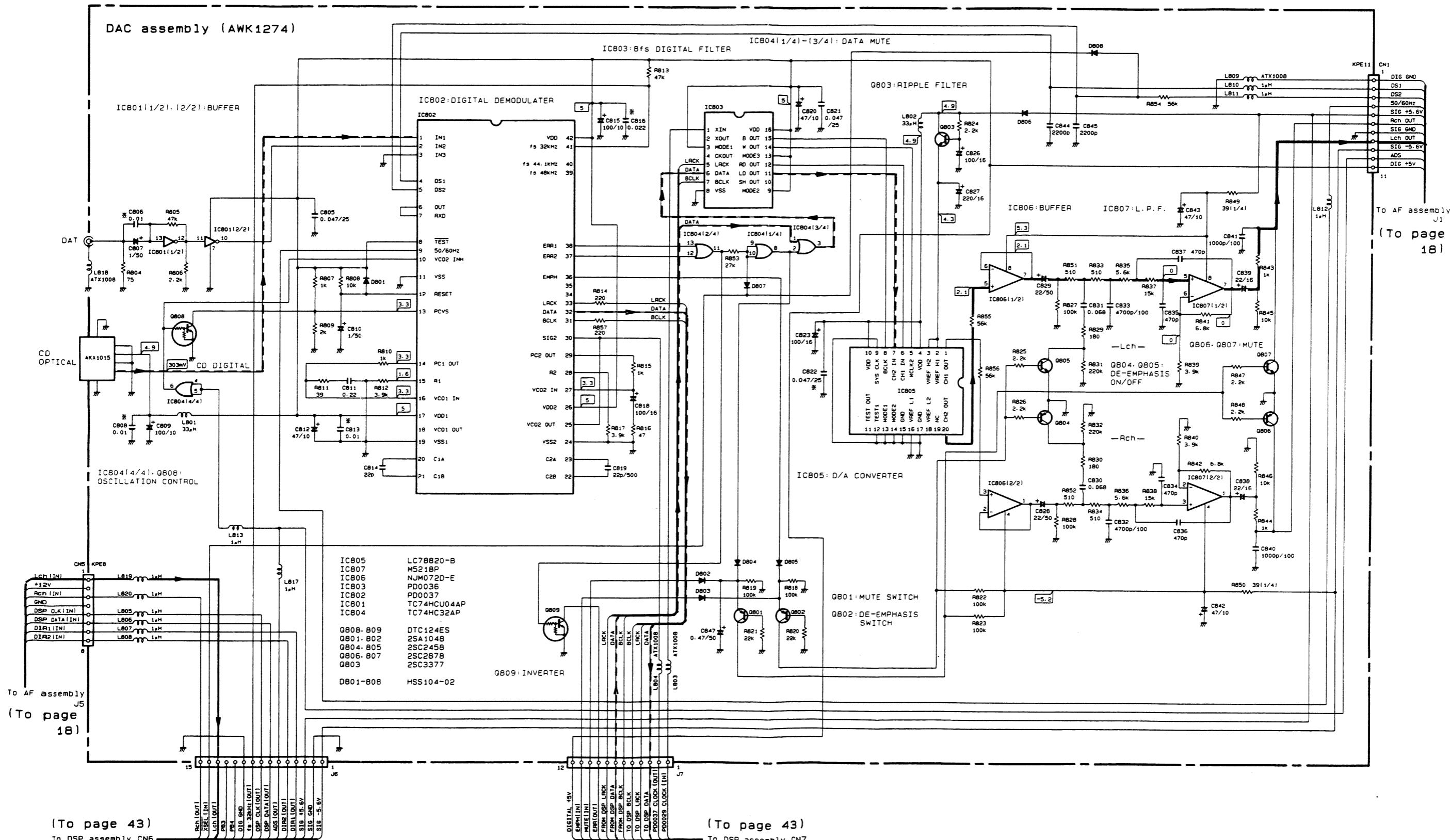
3. The capacitor terminal marked with (double circles) shows negative terminal.
4. The diode terminal marked with (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

## DISPLAY assembly (AWZ2743)

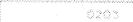




#### 4.4 DAC assembly (AWK1274)



1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

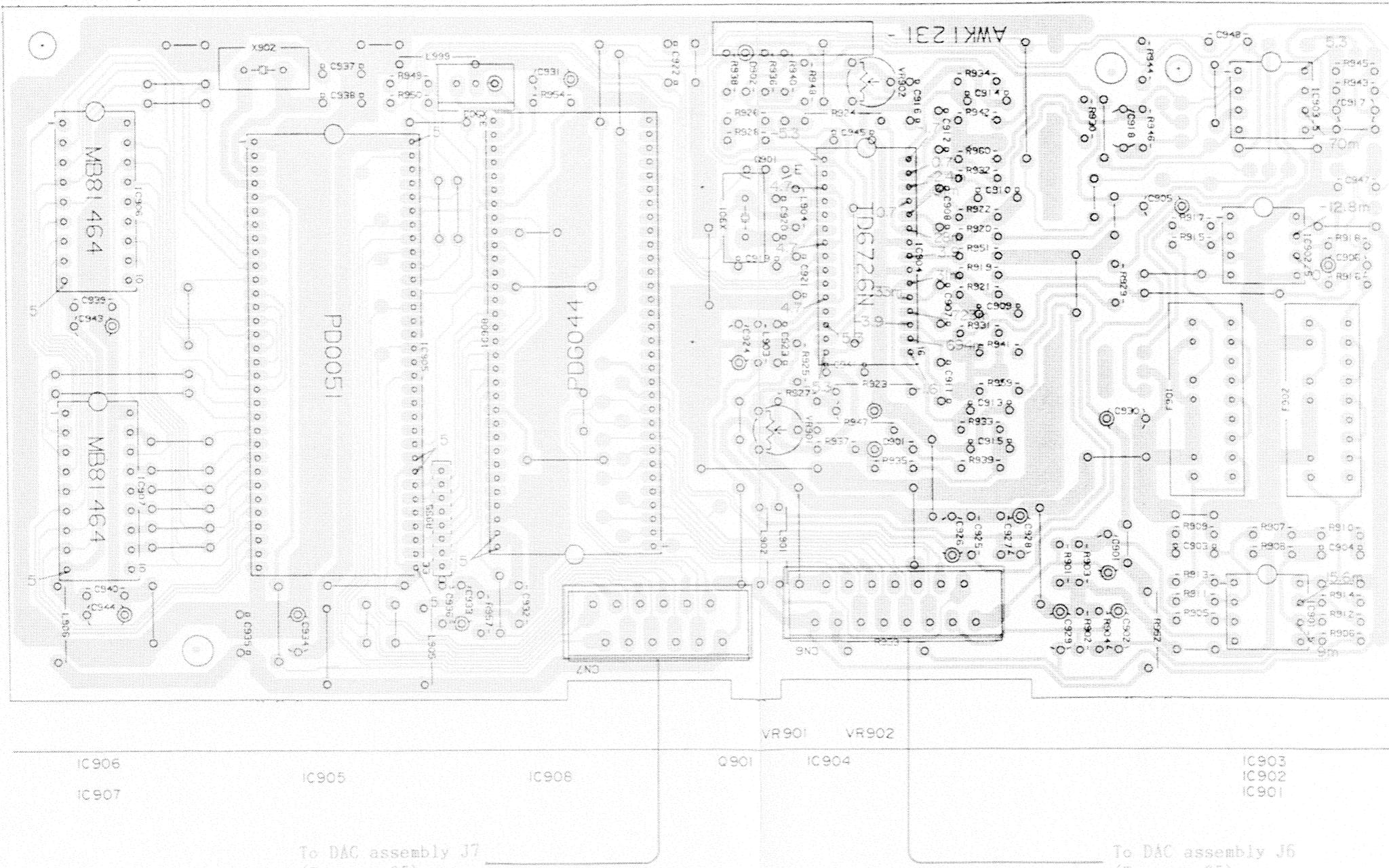
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator-type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

- The capacitor terminal marked with  shows negative terminal.
- The diode terminal marked with  shows cathode side.
- The transistor terminal to which E is affixed shows the emitter.

1. The transistor terminal to which C is affixed shows the emitter.

## 4.5 DSP assembly (AWK1231)

DSP assembly (AWK1231)



## NOTE

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
①-004	or	Transistor
②-015	or	Radiator type transistor
③-025	or	Diode
④-R237	R237	Resistor
⑤-C013	+	Capacitor (Polarity)
⑥-C018	-	Capacitor (Non-polarity)

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
P	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⑤ (double circles) shows negative terminal.
4. The diode terminal marked with ③ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

A

A

B

B

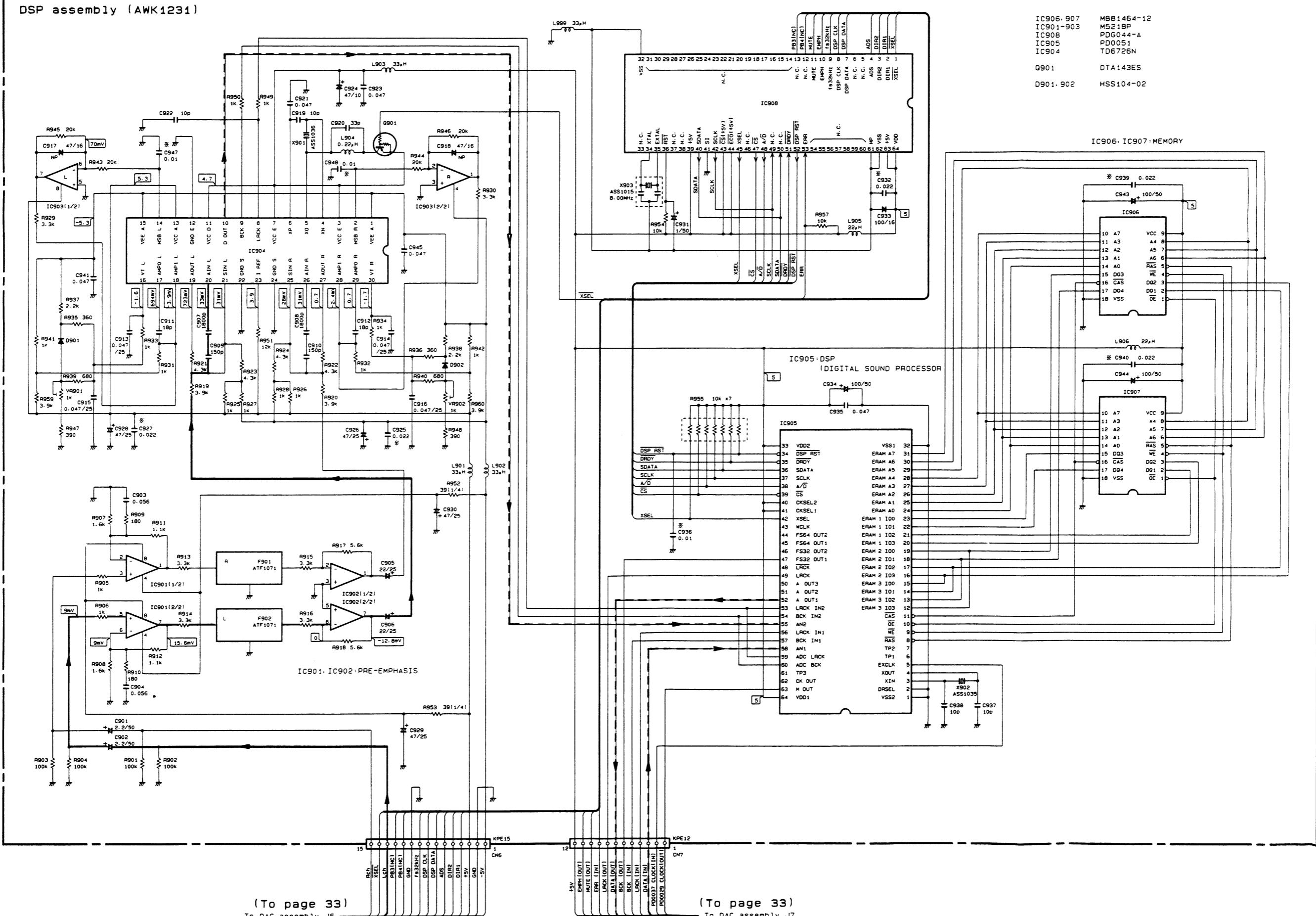
C

C

D

D

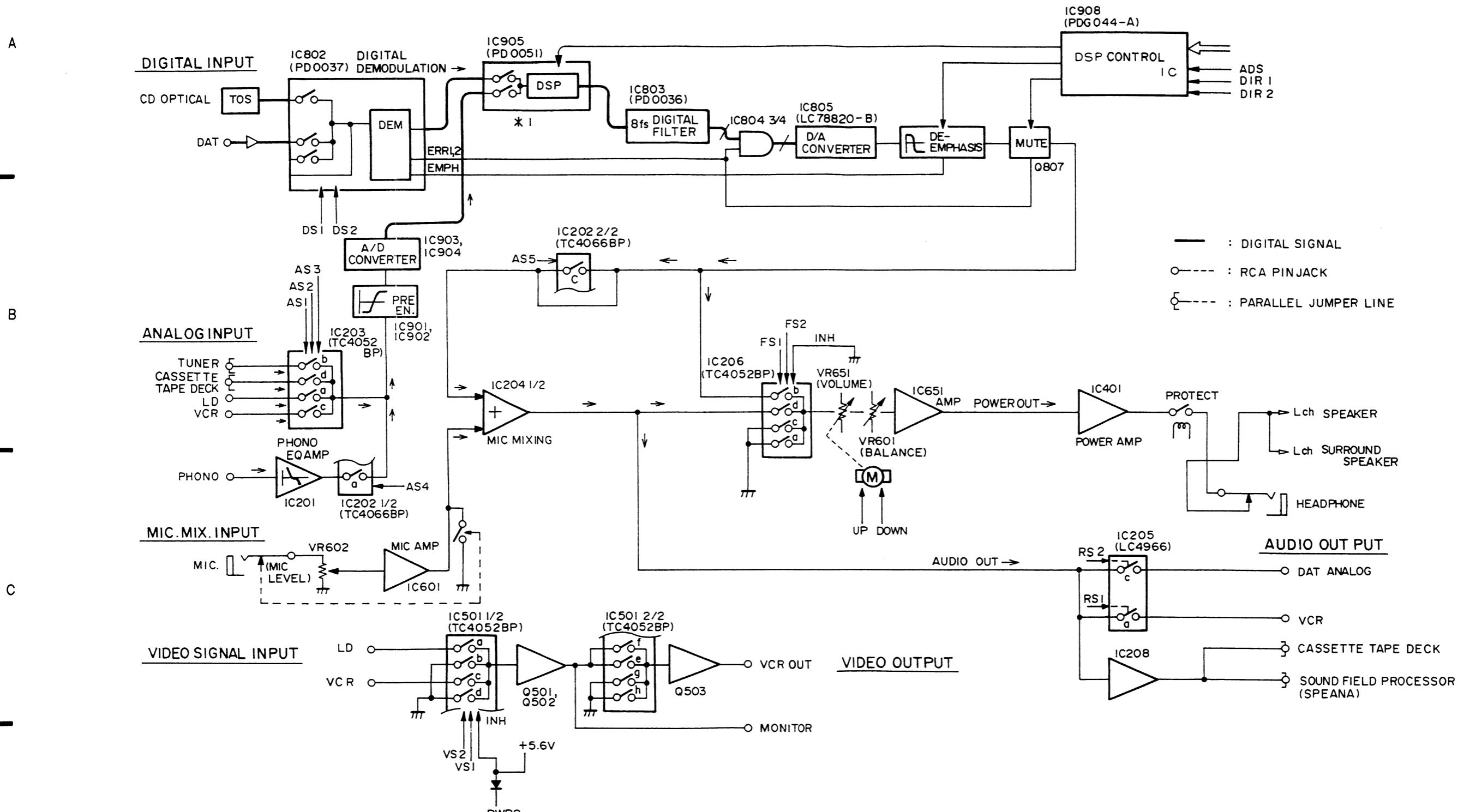
DSP assembly (AWK1231)



(To page 33  
To DAC assembly J6 -

(To page 33  
— To DAC assembly

## 5. BLOCK DIAGRAM



## 6. ADJUSTMENTS

1. If the SP-Z560 (sound field processor) is connected to the A-Z560, disconnect them. (This makes DSP processing in the A-Z560 flat.)
2. Input 1kHz/600mV to LD INPUT AUDIO Lch and Rch, then turn function to LD, followed by turning the main VR into the center position.
3. Adjust the VR901 (Rch) and VR902 (Lch) until the distortion of the Lch and Rch is minimized (0.15% or less) at the speaker output.

## 6. RÉGLAGE

1. Si le SP-Z560 (processeur de champ d'ambiance) est connecté au A-Z560, les déconnecter. (Ceci neutralise le traitement DSP dans le A-Z560.)
2. Entrer 1kHz/600mV aux bornes gauche et droite d'entrée audio LD (LD INPUT AUDIO), mettre le sélecteur de fonction sur "LD", suivi du réglage de la résistance variable (VR) principale à la position centrale.
3. Régler VR901 (D) et VR902 (G) jusqu'à ce que la distorsion des canaux gauche et droit soit réduite (0.15% ou moins) à la sortie des haut-parleurs.

## 6. AJUSTE

1. Si el SP-Z560 (procesador de campo sonoro) está conectado al A-Z560, desconéctelos. (De este modo el procedo DSP en el A-Z560 será plano.)
2. Introduzca 1kHz/600mV en los canales izquierdo y derecho de INPUT AUDIO del LD, cambie entonces la función a LD, y gire luego la VR principal a la posición central.
3. Ajuste la VR901 (canal derecho) y VR902 (canal izquierdo) hasta que la distorsión de los canales izquierdo y derecho se minimice (0.15% o menos) en la salida del altavoz.

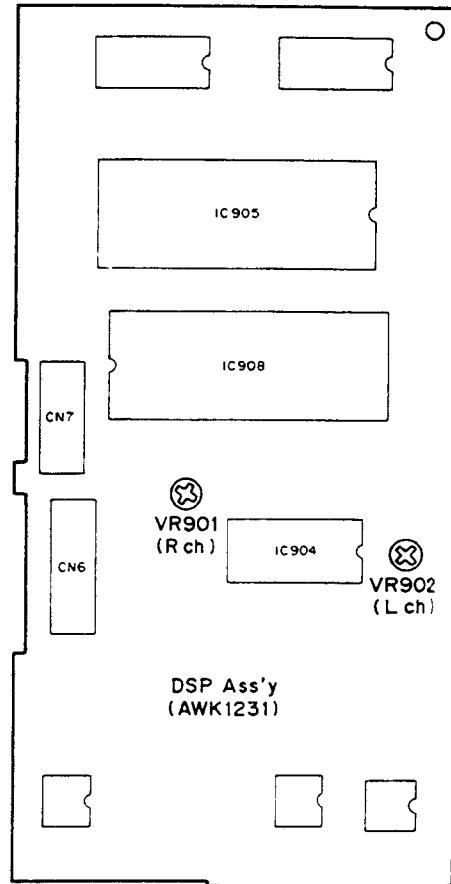


Fig. 6-1 Adjustment location

Fig. 6-1 Emplacements de réglage

Fig. 6-1 Puntos de ajustes

## 7. IC INFORMATION

### 7.1 PDG044-A (DSP control IC)

- Terminal function

No.	Terminal name	I/O	Function	Active
1	XSEL	O	Inverted output of XSEL	H/L
2	DIR1	I	DIRECT ON/OFF detection input	H/L
3	DIR2	I		
4	ADS	I	ANALOG/DIGITAL detection input (H: ANALOG)	H/L
5	N.C.	I	Not used	—
6	N.C.	O	Not used	—
7	DSP DATA	I	DATA input from micro computer (PD3141) used as sound field processor	H/L
8	DSP CLK	I	CLK input from micro computer (PD3141) used as sound field processor	H/L
9	fs 32kHz	I	32kHz SAMPLING frequency input	H/L
10	EMPH	O	EMPHASIS ON/OFF output	H/L
11	MUTE	O	MUTE ON/OFF output	H
12	N.C.	O	Not used	—
13	N.C.	O	Not used	—
14	N.C.	O	Not used	—
15	N.C.	O	Not used	—
16	N.C.	O	Not used	—
17	N.C.	O	Not used	—
18	N.C.	O	Not used	—
19	N.C.	O	Not used	—
20	N.C.	O	Not used	—
21	N.C.	O	Not used	—
22	N.C.	O	Not used	—
23	N.C.	O	Not used	—
24	N.C.	O	Not used	—
25	N.C.	O	Not used	—
26	N.C.	O	Not used	—
27	N.C.	O	Not used	—
28	N.C.	O	Not used	—
29	N.C.	O	Not used	—
30	N.C.	O	Not used	—
31	N.C.	O	Not used	—

No.	Terminal name	I/O	Function	Active
32	Vss	—	GND	—
33	N.C.	O	Not used	—
34	XTAL	O	Connected to the 8MHz ceramic resonator	—
35	EXTAL	I		—
36	<u>RST</u>	I	RESET terminal	L
37	N.C.	O	Not used	—
38	N.C.	O	Not used	—
39	<u>EC1</u>	I	+5V	—
40	S DATA	O	DATA output to DSP IC (PD0051)	H/L
41	SI	I	GND	—
42	<u>SCLK</u>	O	CLOCK output to DSP IC (PD0051)	H/L
43	<u>CS</u>	I	+5V	—
44	<u>EC0</u>	I	+5V	—
45	XSEL	O	Output for XSEL switching	H/L
46	N.C.	O	Not used	—
47	<u>CS</u>	O	CS output to DSP IC (PD0051)	L
48	<u>A/D</u>	O	Out put to DSP IC(PD0051)for switching between ADDRESS and DATA	H/L
49	SCLK	O	Not used (This pin is not used although SCLK signals are input here.)	—
50	SDATA	O	Not used (This pin is not used although SDATA signals are input here.)	—
51	<u>DRDY</u>	I	DRDY input from DSP IC (PD0051)	H/L
52	<u>DSP RES</u>	O	RESET output to DSP IC (PD0051)	L
53	ERROR	I	ERROR input for digital demodulator	H/L
54	N.C.	I	Not used	—
55	N.C.	O	Not used	—
56	N.C.	O	Not used	—
57	N.C.	O	Not used	—
58	N.C.	O	Not used	—
59	N.C.	O	Not used	—
60	N.C.	O	Not used	—
61	MP	I	GND	—
62	Vss	—	GND	—
63	+5V	—	+5V	—
64	Vdd	—	+5V	—

Note) I: CMOS input  
O: CMOS output

## 7.2 PD5118 (System control micro computer)

### 7.2.1 Terminal function

No.	Terminal name	Function	Active	I/O													
1	Vcc	Vcc	—	—													
2	AVss	GND	—	—													
3	VREF	STB +5V	—	I													
4	PROTECT	Protection relay control (H: Relay ON)	H	O													
5	LCD INH	LCD display assembly control bus line initialization	H/L	O													
6	LCD CE	LCD display assembly control bus line chip enable	H/L	O													
7	LCD DATA	LCD display assembly control bus line data	H/L	O													
8	LCD CLK	LCD display assembly control bus line clock	H/L	SO													
9	LED MUTE	MUTE LED control (L: ON)	L	O													
10	VR POSITION	This pin detects the VR position (A/D conversion of analog input) and stores it in the memory. The position is used for servo-control of the motor in the LS mode when the power is turned on after the timer record.	—	I													
11	VR UP	These pins are used for controlling the volume motor via VOL UP/DOWN commands from the remote controller.	H/L	O													
12	VR DOWN	<table border="1"> <thead> <tr> <th>Pin 11</th> <th>Pin 12</th> <th>MOTOR Status</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>Stop (in the normal mode)</td> </tr> <tr> <td>0</td> <td>1</td> <td>DOWN</td> </tr> <tr> <td>1</td> <td>0</td> <td>UP</td> </tr> <tr> <td>1</td> <td>1</td> <td>Stop (except for immediately after the prohibited mode RESET)</td> </tr> </tbody> </table>			Pin 11	Pin 12	MOTOR Status	0	0	Stop (in the normal mode)	0	1	DOWN	1	0	UP	1
Pin 11	Pin 12	MOTOR Status															
0	0	Stop (in the normal mode)															
0	1	DOWN															
1	0	UP															
1	1	Stop (except for immediately after the prohibited mode RESET)															
13	E-VR CLK	Not used															
14	E-VR DATA																
15	PWR 1	Power relay ON/OFF (L: ON)	L	O													
16	PWR 2	Power electric (Q553) switch ON/OFF (L: ON)	L	O													
17	TSD	System bus control serial data for the tuner	H/L	I/O													
18	EN/REQ (TX)	System bus control enable/request for the tuner	H/L	I/O													
19	EN/REQ (DSP)	System bus control enable/request for the sound field processor	H/L	I/O													
20	EN/REQ (CT)	System bus control enable/request for the tape deck	H/L	I/O													
21	EN/REQ (CD)	System bus control enable/request for the CD player	H/L	I/O													
22	SD	System bus control serial data	H/L	I/O													
23	SCK	System bus control serial clock	H/L	O													

No.	Terminal name	Function	Active	I/O
24	SM 2	LD LED and VCR LED control for VIDEO SIGNAL SELECTOR	H/L	O
25	SM 1			
26	RMT IN	Remote control signal input (L: When receiving)	L	I
27	CN Vss	GND	—	—
28	RESET	RESET input	L	I
29	X IN		—	I
30	X OUT	Connected to the 4MHz crystal resonator	—	O
31	NC	Not used	—	—
32	Vss	GND	—	—
33	POD	EDGE DET (It switches to the back-up mode when 50/60Hz signals are detected or there are no input pulses for more than 50msec.)		I
34	GND	GND	—	I
35			—	—
36	KI5	Key matrix input	L	I
37	KI4		L	I
38	KI3		L	I
39	KI2		L	I
40	KI1		L	I
41	LED TAPE	TAPE IND LED control (L: ON)	L	O
42	LED VCR	VCR IND LED control (L: ON)	L	O
43	LED TX	TUNER IND LED control (L: ON)	L	O
44	LED LD	LD IND LED control (L: ON)	L	O
45	LED PHONO	PHONO IND LED control (L: ON)	L	O
46	LED BS	Not used	—	O
47	LED DA	DAT IND LED control (L: ON)	L	O
48	LED CD	CD IND LED control (L: ON)	L	O
49	KO3	Key matrix output		O
50	KO2			O
51	KO1			O
52	LED SIMAL	VIDEO SIGNAL SELECTOR LED ON/OFF control (L: ON)	L	O
53	RS2	Signal control (See figure 7-1)	H/L	O
54	RS1		H/L	O

No.	Terminal name	Function	Active	I/O
55	AS5/ADS	Signal control (See figure 7-1)	H/L	0
56	AS4		H/L	0
57	AS3		H/L	0
58	AS2/DS2		H/L	0
59	AS1		H/L	0
60	VS2		H/L	0
61	VS1		H/L	0
62	S3/DS1		H/L	I/O
63	S2/FS2/DIR2	Signal control (See figure 7-1), These pins are also used as a model selector for A-Z560, A-Z460 and A-Z360 (See below).	H/L	I/O
64	S1/FS1/DIR1		H/L	I/O

#### • VIDEO SIGNAL SELECTOR

Pin No.	25	24	52	Function and LED status
Name	SM1	SM2	LED SIMAL	
Logic	L	L	H	For V-SEL OFF, the LED in each video system lights red according to the function
	L	H	L	For V-SEL ON, the LED of the VCR lights orange
	H	L	L	For V-SEL LD ON, the LED of the LD lights orange

#### • Model select

Pin No.	Pin 64	Pin 63	Pin 62
Model name	S1	S2	S3
A-Z560	H	L	L
A-Z460 and A-Z360	H	H	L

H: Pull up

L: Pull down

In this case, Pins 62-64 function as an input port.

### 7.2.2 Signal control circuit

As shown in previous tables, the pins 53–64 in the A-Z560 of the system control micro computer PD5118 are used to control (or switch ON/OFF) each signal. To confirm which signal controls which IC, refer to figure 7–1.

The control of ICs is summarized in the following logic tables. The logic in the tables refers to input values for each controlled IC instead of the output values of the PD5118.

Refer to each circuit diagram for switch names (a, b and c, etc.) in the switch status of these tables.

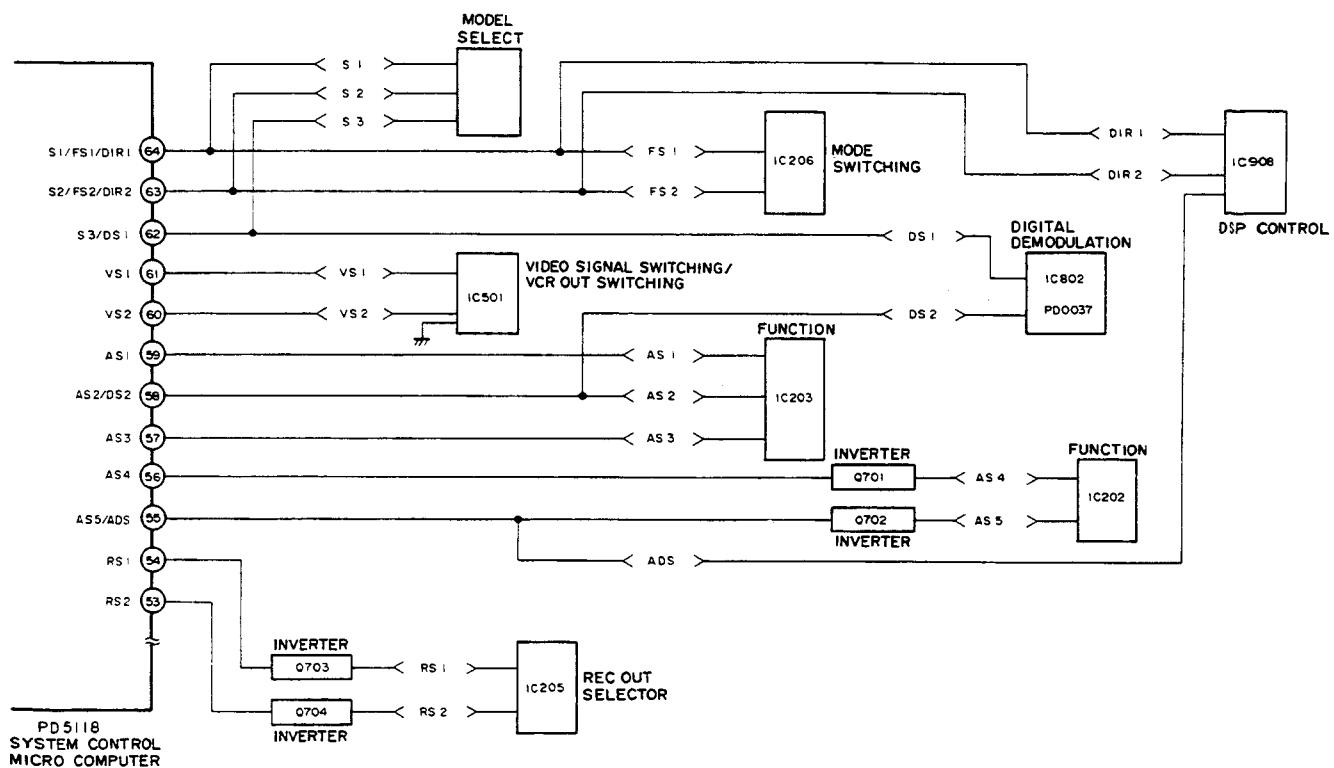


Figure 7–1 Circuit diagram of signal control pins

- IC501 (TC4052BP) (1/2) : Switching of VIDEO signals
- IC501 (TC4052BP) (2/2) : Switching of VCR OUT

Pin No.	6	10	9	Signals of MONITOR OUT pin (※2)	Signals of VCR OUT pin (※2)	Function
Name	INT	VS1	VS2			
Logic	L	L	L	LD (a: ON)	LD (e: ON)	LD
	L	L	H	Mute ON (d: ON)	Mute ON (g: ON)	Other than LD and VCR
	L	H	H	VCR (c: ON)	Mute ON (h: ON)	VCR
	H	×	×	Mute ON (a-d: OFF)	Mute ON (e-f: OFF)	POWER OFF (※1)

※1: To prevent screen pop when the power is turned OFF, MONITOR and VCR OUT are muted.  
 ※2: Switching status of IC is shown in parenthesis.

#### • IC203 (TC4052BP) Function

Pin No.	6	10	9	Switch status		Function	Remarks
Terminal name	AS3	AS1	AS2	Lch	Rch		
Logic	L	L	L	a:on	e:on	LD	
	L	H	L	b:on	f:on	TUNER	
	L	L	H	d:on	h:on	TAPE DECK	
	L	H	H	c:on	g:on	VCR	
	H	H	L	Switches, a-g, go to OFF		CD	Selection in the IC802
	H	H	H			DAT	
	H	H	H			PHONO	Selection in the IC202

#### • IC206 (IC4052BP) Switching of modes

Pin No.	6	10	9	Switch status		Mode		Signal to volume
Name	INH ※1	FS1	FS2	Lch	Rch	Direct	Mute	
Logic	L	L	L	d: ON	h: ON	OFF	OFF	Signals after MIC MIX
	L	H	L	a: ON	e: ON	OFF	ON	Signals are muted
	L	L	H	b: ON	f: ON	ON	OFF	Signals before MIC MIX
	L	H	H	c: ON	g: ON	ON	ON	Signals are muted

※1: INH is always connected to the ground line.

- IC202 (TC4066BP) Function

#### PHONO ON/OFF

Pin No.	5, 13	Switch status		Function
Name	AS4	Lch	Rch	
Logic	H	a: on	b: on	PHONO
	L	a: off	b: off	Others

#### D/A CONVERTER OUT ON/OFF

Pin No.	6, 12	Switch status		Function
Name	AS5	※1	Lch	
Logic	H	c: on	d: on	CD or DAT
	L	c: off	d: off	Other than CD and DAT

※1: As for A-Z560, the switching status driven by these signals is independent of the circuit.

- IC205 (LC4966) Audio REC output selection

#### VCR OUT selection

Pin No.	5, 6	Switch status		Function	Output signal from the VCR OUT pin
Name	RS1	Lch	Rch		
Logic	H	a: on	b: on	Other than VCR	Any selected signal other than the VCR
	L	a: off	b: off	VCR	No output from the VCR OUT pin

#### DAT OUT selection

Pin No.	12, 13	Switch status		Function	Output signal from the DAT OUT pin
Name	RS2	Lch	Rch		
Logic	H	c: on	d: on	Other than DAT	Any selected signal other than DAT
	L	c: off	d: off	DAT	No output from the DAT OUT pin

- IC802 (PD0037) Digital input signal selection

Pin No.	4	5	Function
Name	DS1	DS2	
Logic	H	L	CD
	L	H	DAT (plus PHONO, VCR and TAPE) ※1
	L	L	(LD, TUNER) ※1

※1: Functions in parentheses are analog input values which are independent of switching of the PD0037.

- **IC908 (PDG044) DSP control IC**

**Direct detection**

- This IC detects DIRECT ON/OFF, and does not generate DSP signal processing when DIRECT ON.

Pin No.	2	3	Mode	
Name	DIR 1	DIR 2	Direct	Mute
Logic	L	L	OFF	OFF
	H	L	OFF	ON
	L	H	ON	OFF
	H	H	ON	ON

**Input selection**

- In the PD0051, digital signals from PHONO, LD, TUNER, VCR and TAPE in the analog function system are input to pin 55 (AN2), while signals from CD and DAT in the digital system are input to pin 58 (AN1).

This input selection is made by ADS signals.

Pin No.	4	Function
Name	ADS	
Logic	L	CD, DAT
	H	Other than CD and DAT

## 8. FOR HE TYPE

### CONTRAST OF MISCELLANEOUS PARTS

The A-Z560/HE type is the same as the A-Z560/HB type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		A-Z560/HB type	A-Z560/HE type	
▲	SUB TRANS assembly	Non supply	Non supply	
▲	FU1 Fuse (T2.5A/250V)	AEK-512	AEK-403	
▲	FU2 Fuse (T2A/250V)	AEK-511	AEK-017	
▲	FU3, FU4 Fuse (T1.6A/250V)	AEK-510	AEK-405	
▲	AC power cord	ADG-051	ADG1019	
	Operating instructions (English)	ARB1221	.....	
	Operating instructions (Dutch,Swedish,Spanish,Portuguese)	.....	ARC1178	
	Operating instructions (English,German,French,Italian)	.....	ARE1139	

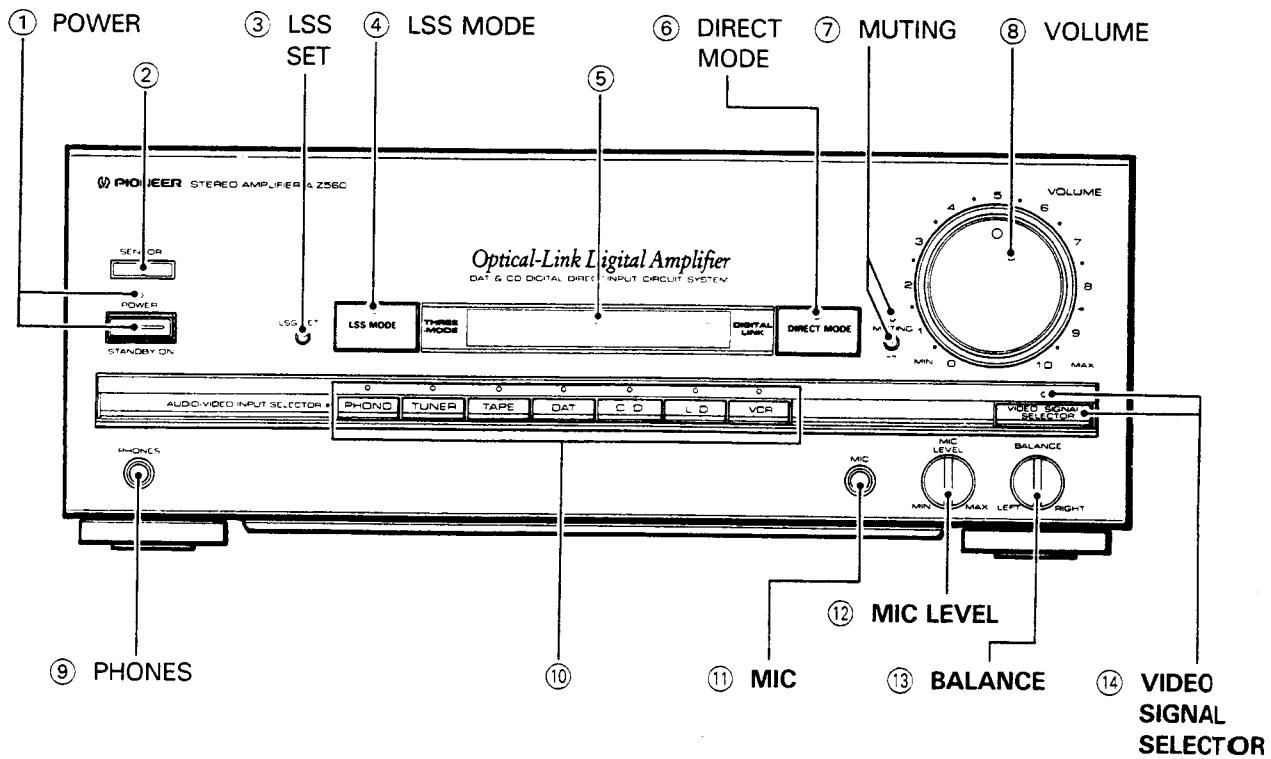
### SUB TRANS assembly

The SUB TRANS assembly (A-Z560/HE type) is the same as the SUB TRANS assembly (A-Z560/HB type) with the exception of the following sections.

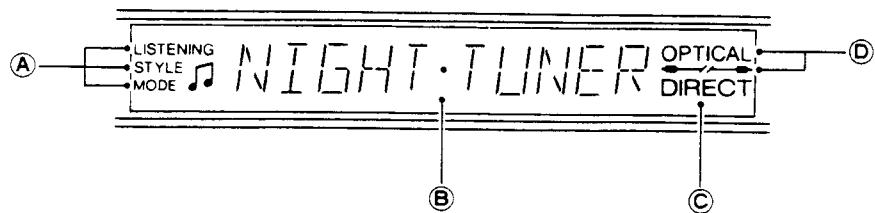
Mark	Symbol & Description	Part No.		Remarks
		HB type	HE type	
▲	1P AC outlet	AKP1035	AKP1034	

## 9. PANEL FACILITIES

### Front panel



### Display section



**① POWER STANDBY/ON switch/indicator**

This is the switch for electric power.

**ON** .... When set to the ON position, power is supplied and the unit becomes operational.

**STANDBY** .... When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The indicator above the switch lights when the power is ON, and goes out during STANDBY.

During STANDBY, the tuner display only shows the time on the clock.

**② Remote sensor****③ LSS SET switch**

Use to operate the Listening Style Selector memory.

**④ LSS MODE switch**

Use to recall the Listening Style Selector.

**⑤ Display section****⑥ DIRECT MODE switch**

Use this when you want by-pass sound quality adjustment circuitry and listen to a CD or DAT in the direct mode.

**⑦ MUTING switch/indicator**

Use when you want to temporarily cut sound during playback. Press again to return to the previous volume level.

**⑧ VOLUME control****⑨ PHONES jack**

For stereo headphones.

*NOTE:*

*There is no output from the speakers when headphones are plugged into PHONES jack.*

**⑩ Input selector switches/indicators****[PHONO]**

Press to play records on a turntable connected to the PHONO input jacks.

**[TUNER]**

Press to listen to radio broadcast.

**[TAPE]**

Press to listen to cassette tape.

**[DAT]**

Press to listen to a DAT playing on a digital audio tape deck connected to the DAT jacks.

**[CD]**

Press to listen to compact disc.

**[LD]**

Press to play an LD on a video disc player connected to the LD input jacks.

**[VCR]**

Press to play a tape on a video cassette recorder connected to the VCR jacks.

**⑪ MIC (microphone) jack**

This is a standard jack for connecting a microphone.

*NOTE:*

*Mike mixing is not possible when CD DIRECT or DAT DIRECT are ON.*

**⑫ MIC LEVEL control**

Used for adjusting the volume of microphone.

**⑬ BALANCE control**

Used for changing the balance between left and right channels. Usually set this control to the center position.

**⑭ VIDEO SIGNAL SELECTOR switch/indicator**

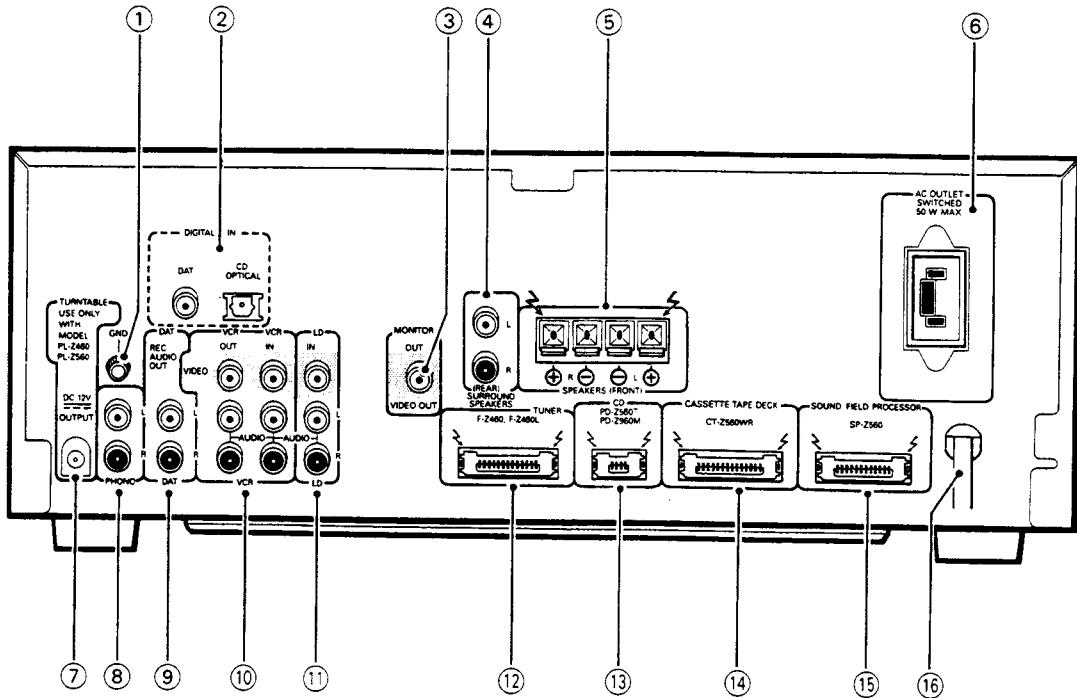
Pressing this switch lets you select video sources independent of those selected with the input selector switches. Each time you press it, the source changes.

**A** This lights during listening style selector operation.

**B** Information such as the component selected with the input selector switch and listening style selector position is displayed.

**C** This lights when you can select CD and DAT direct mode.

**D** This lights when you play a CD.



### ① Ground terminal (GND)

Connect this to the ground terminal on the turntable (except for PL-Z560).

### ② DIGITAL IN jacks

#### [DAT]

A digital audio tape deck's digital output jack (coaxial cable output) can be connected here.

Consult with your dealer to see if it's possible to connect your digital audio tape deck.

#### [CD]

Connect a CD player's OPTICAL OUT jack.

### ③ MONITOR OUT jack

You can connect a TV with a video input jack or monitor TV here. The picture from a video disc player or video cassette recorder connected to the video input jack is output.

### ④ SURROUND SPEAKERS jacks

Connect the Surround speaker systems.

#### NOTE:

Connect a speaker system having a nominal impedance of  $16\ \Omega$  or more.

### ⑤ SPEAKERS terminals

L: Connect the left speaker system as seen from the listening position.  
R: Connect the right speaker system as seen from the listening position.

#### NOTE:

Connect a speaker system having a nominal impedance ranging from  $6\ \Omega$  to  $16\ \Omega$ .

### ⑥ AC OUTLET (SWITCHED 50 W MAX)

Power supplied through this outlet is turned on and off by the amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W.

#### NOTE:

Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire risk.

This can cause the amplifier to malfunction.

### ⑦ TURNTABLE (DC 12V OUTPUT) jack

This jack supplies power to the turntable.

### ⑧ PHONO input jacks

Connect the output cord of the turntable to these jacks.

### ⑨ DAT REC OUT jacks

Connect to audio input jacks of the digital audio tape deck.

### ⑩ VCR jacks

IN: Connect to the audio and video output jack of VCR.

OUT: Connect to audio and video input jacks of VCR.

### ⑪ LD input jacks

Connect to audio and video output jacks of the videodisc player.

### ⑫ TUNER jack

Connect the tuner cord here.

### ⑬ CD jack

Connect the compact disc player cord here.

### ⑭ CASSETTE TAPE DECK jack

Connect the cassette deck cord here.

### ⑮ GRAPHIC EQUALIZER jack

Connect the sound field processor cord here.

### ⑯ Power cord

Connect this to the AC wall socket.